OCTOBER 1, 1949

MODERN MEDICINE

The Journal of Diagnosis and Treatment

Dr. W. R. Lovelace *(see page 8)*

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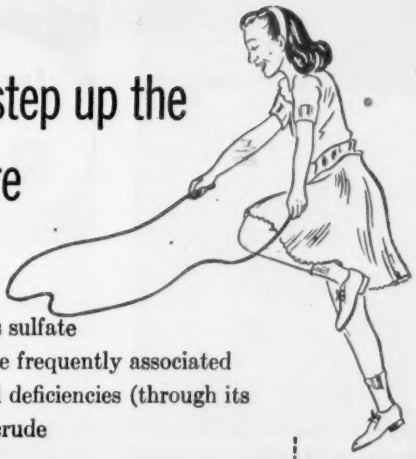

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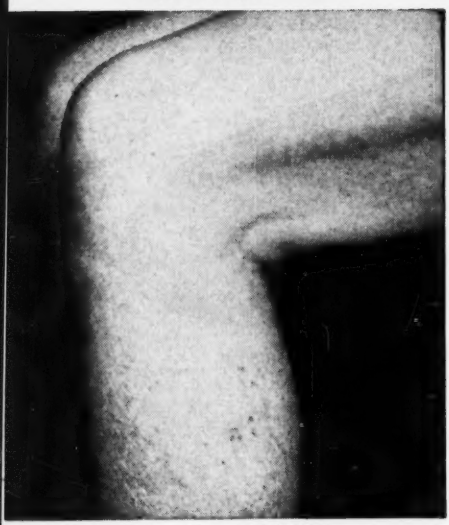

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THE MAN ON THE COVER is William Randolph Lovelace, M.D., founder and Chairman of the Board of Governors of the Lovelace Clinic and a founder and trustee of the Lovelace Foundation for Medical Education and Research, Albuquerque, New Mexico. The Foundation building is shown in the background. Dr. Lovelace is a member of the Founders Group of the American Board of Surgery and First Vice-President of the United States Chapter of the International College of Surgeons. He is the author of the article on Hyperthyroidism on page 58.

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LETTER FROM THE EDITOR

Dear Reader:

This is written to alert you for something special. The October 15 issue of MODERN MEDICINE will contain an up-to-the-minute Symposium on Gastrointestinal Diseases.

New methods of treatment are being constantly advanced. Old methods are modified and perfected. Diagnostic technics are being refined and made more definitive. Because of the importance of these developments, the Symposium on Gastrointestinal Diseases should prove of special interest to every practitioner who is seeking better ways to serve his patients.

The contributors to the symposium include:

Walter Lincoln Palmer and Joseph B. Kirsner
Functional Disorders of the Gastrointestinal Tract

Alton Ochsner
Diagnosis and Treatment of Surgical Esophageal Lesions

G. B. Eusterman
Medical Treatment of Gastric and Duodenal Ulcer

James M. Fritz and Lester R. Dragstedt
Vagotomy: Indications and Results

Albert F. R. Andresen
Management of Gastric Hemorrhage

M. I. Grossman
Hormones of the Digestive Tract

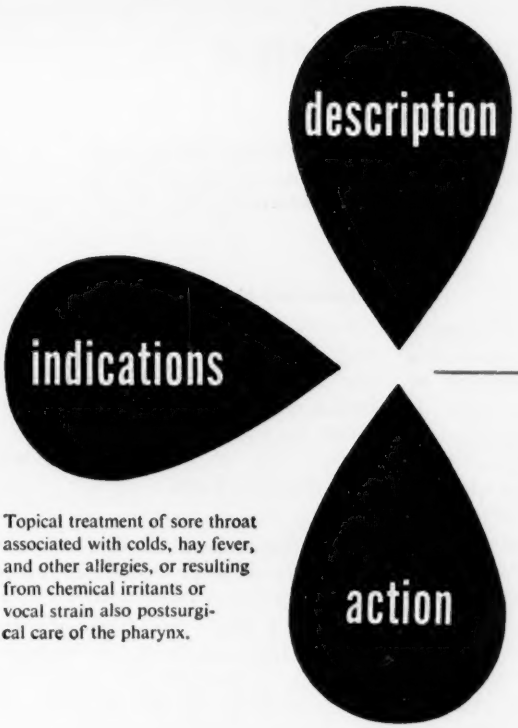
James B. Carey
Cancer of the Stomach

Dwight L. Wilbur and Charles D. Armstrong
Deficiency Diseases of the Gastrointestinal Tract

J. Arnold Bargen
Colitis and Enteritis

Richard B. Cattell
Indications for Surgical Treatment of Ulcerative Colitis

All in all the October 15 issue of MODERN MEDICINE comprises an unusually complete postgraduate course in gastrointestinal diseases.



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Correspondence

Communications from the readers of MODERN MEDICINE *are always welcome. Address communications to The Editors of* MODERN MEDICINE, *84 South 10th St., Minneapolis 3, Minn.*

Since the Ibis on the Nile

TO THE EDITORS: Some time ago I read in your informative magazine comments on the administration of enemas *(Modern Medicine,* Mar. 1, 1949, p. 20; May 1, 1949, p. 16).

As you well know, enemas have been administered since the observation of the ibis on the Nile, who took water in his bill and squirted it into his rectum and then had a movement of his bowels. The history of enemas is an interesting one. However, the comments in your magazine were also extremely interesting and especially those by the radiologist.

DALTON RICHARDSON, M.D.
Austin, Tex.

Parboiled Treponemitis?

TO THE EDITORS: I detect a note of sadism in the venereologist's reply to M.D., New Jersey *(Modern Medicine,* Aug. 15, 1949, p. 34). The M.D. stated that the needle that punctured his finger had been boiling one minute. That's enough! Forget it—don't bother to take any further tests unless, to add a sadistic note of my own, there is such a thing as *parboiled treponemitis.* Who knows? Science hasn't investigated that possibility!

HAROLD ELCANESS, M.D.
Bronx, N.Y.

Information at Your Finger Tips

TO THE EDITORS: Your new chart on tropical diseases is very comprehensive and certainly puts a world of information right at your finger tips (June 15, 1949, p. 66).

W. H. ELLIOTT, JR., M.D.
Palm Springs, Calif.

► TO THE EDITORS: In the informative table on tropical diseases caused by parasites (*Modern Medicine,* June 15, 1949, p. 66), I notice lack of reference to Hetrazan Diethylcarbamazine Lederle. In the eighteen months since the introduction of this drug its value has been proved in treatment of filariasis due to *Wuchereria bancrofti* and *W. malayi,* onchocerciasis, and *Loa loa.*

Extensive studies in India, Uganda, Venezuela, Virgin Islands, and the South Pacific have established Hetrazan's value not only in the clinic, but also in the field, where ambulatory treatment for less than a week with this nontoxic drug will reduce microfilariae counts at least 90%. These reductions, which have remained for over a year, provide a means of breaking the insect-man cycle and clear endemic areas of these infections.

Many of these studies have already appeared in literature, and others are now in press. A complete bibliography

to any interested physician can be obtained from the Director of Professional Service, Lederle Laboratories Division, American Cyanamid Co., 30 Rockefeller Plaza, New York 20, N.Y.

Although information is too recent to have appeared in your table, I should like to add that aureomycin, the new antibiotic, has shown rapid effectiveness in treatment of numerous cases of acute amebiasis. Please refer to the preliminary paper by Drs. L. V. McVay, R. L. Laird, and D. H. Sprunt, *Science* 109:590-591, 1949.

RUTLEDGE W. HOWARD, M.D.

New York City

¶ Reprints of the Tropical Disease Chart, now ready for distribution, have been brought up to date in accord with Dr. Howard's suggestion.—Ed.

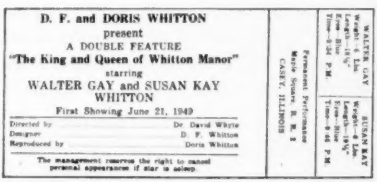
Special for Twins

TO THE EDITORS: Enclosed is a ticket mailed to me following the delivery of twins last month. The ticket seemed such a novelty to the files of the general practitioner, that I am mailing it to you in the hope that you use it for publication.

DAVID WHYTE, M.D.

Casey, Ill.

¶ Here is the ticket.—Ed.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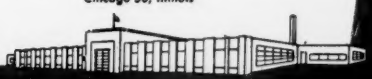

Cheers or Silence?

TO THE EDITORS: Hats off to Dr. W. A. Kilduff, and he needs no shoe horn to replace his chapeau. In regard to his excellent observations that only two specialties exist in medicine—x-ray and pathology *(Modern Medicine,* July 15, 1949, p. 14), I would make the number of specialists two and one-half by adding a part-time psychiatrist.

It was pointed out circa 1930, and still holds today, that:

A *Specialist* is one who knows more and more about less and less until he knows everything about nothing.

A *General Practitioner* is one who knows less and less about more and more until he knows nothing about everything.

Further this deponent saith not.

R.R.B.

Hollywood, Calif.

► TO THE EDITORS: In reply to Dr. Kilduff on only two specialties:

A few years ago a radio comedian frequently said, "Shall I tell 'em?"

That's the way with Dr. Kilduff. He's pretty well satisfied with himself, so why disillusion him?

ORTON E. WHITE, M.D.

Syracuse, N. Y.

► TO THE EDITORS: My compliments to you on the excellence of *Modern Medicine.*

H. WECHSLER, M.D.

Bronx

Marvelous

TO THE EDITORS: Your journal is marvelous; keep it up.

M. L. FURMAN, M.D.

New York City

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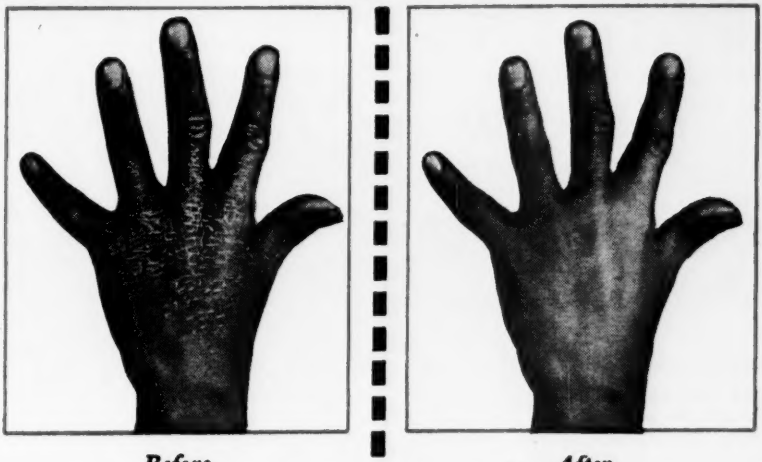

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TO THE EDITORS: Please advise me where the doctor's bag described in the correspondence section in one of your recent issues (Aug. 1, 1949, p. 20) can be obtained.

HARRY APTER, M.D.
Hartford, Conn.

► TO THE EDITORS: Since the appearance of my letter about a more efficient bag for the physician I have received numerous requests for further information. It will save a great deal of wear and tear on my secretary if you would see fit to publish the following information.

The bag can be obtained through any surgical supply house, which in turn can order the bag from H. Gertsner and Sons Co., Cincinnati and Columbia streets, Dayton 7, Ohio.

A. T. HAEREM, M.D.
Redwood City, Calif.

¶Let other readers who have wondered where to get the bag take heed and spare Dr. Haerem's secretary.—Ed.

Symposium Excellent

TO THE EDITORS: Your symposium on diabetes (June 1, 1949) is better than excellent and probably the most read of all recent articles on the subject. It was a masterpiece.

LAURENCE J. FINKELL, M.D.
Highland Park, Mich.

► TO THE EDITORS: You can be very proud of the symposium on diabetes issue (June 1, 1949). I am pleased to have contributed to it. All the comments are glowing.

Would it be possible to obtain several copies for my personal use?

HENRY DOLGER, M.D.
New York City

¶The extra copies have been sent.—Ed.

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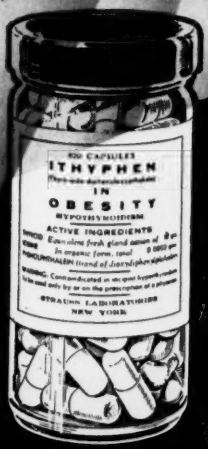

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PROBLEM: A Tennessee statute defines an occupational disease as a condition that can be "diagnosed" as such. Does that require a physician's opinion to establish the fact that an employee suffers from an occupational disease?

COURT'S ANSWER: Yes.

In this case the Tennessee Supreme Court adopted a judicial definition of "diagnosis" as a physician's "conclusion as to the existence or identity of disease, drawn from the observable symptoms." It is commonly known, the court said, "that some symptoms of a given disease, particularly in its early stage, may likewise be symptoms of any one of several other diseases" (219 S. W. 2d 185).

PROBLEM: A druggist sent a patient bichloride of mercury on telephonic request by the doctor who intended to, and claimed that he did, request sending of mild chloride of mercury for application to the patient's scalp. Could the physician be held liable for injury that resulted? The druggist was required by statute to ascertain the purpose for which a buyer intended to use a poison unless prescribed by a physician.

COURT'S ANSWER: Yes.

The Vermont Supreme Court decided in 1926 that the evidence warranted a jury in deciding that the doctor did order sending of bichloride of mercury and that the druggist was free from blame because he did not know the use to which the drug was to be put. The case turned upon the court's conclusion that it was not necessary that a "prescription"—to put the druggist in the clear—be in writing (99 Vt. 499, 134 Atl. 700).

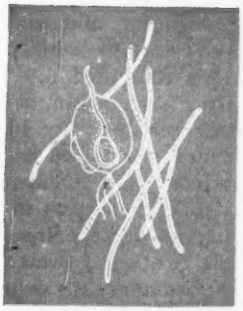
¶ The decision obviously warns physicians against risks involved in prescribing other than in writing. Furthermore, it may be that most courts would say that, legally speaking, a prescription must be in writing, particularly in states where druggists are required by statute to file prescriptions and produce them in court or before a grand jury when required. The chief object of such statutes is to enable governmental control of the sale of injurious articles (28 C. J. S. 512-513). —A.L.H.S.

PROBLEM: Could a jury determine that a hospital intern was the temporary employee of a surgeon in the operating room?

COURT'S ANSWER: Yes.

A father brought suit against an obstetrician for injury to his child's eyes. The injury was allegedly due to excessive application of silver nitrate solution by a hospital intern who acted under the obstetrician's direction when the child was born.

The trial judge dismissed the suit on the ground that the doctor was not liable for the intern's negligence, if any. The Supreme Court of Pennsylvania set aside the dismissal, deciding that it was for the jury to say whether, on the evidence presented, the intern was for the time being the defendant's employee. The majority opinion concluded that if defendant had super-



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1. *Horoschak, A., and Horoschak, S.: Jl. Med. Soc. N. J., 43:92, Mar., 1946.*
2. *Dill, L. V. & Martin, S. S.: Med. Ann. Dist. Col., 17:389, July, 1948.*
3. *Cacciarelli, R. A.: Jl. Med. Soc. N. J., 46:87, Feb., 1949.*

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visory control over the intern and had a right to direct the latter in applying the solution, there was a temporary relationship of employer and employee so far as the doctor's liability to the plaintiff was concerned.

The opinion drew a distinction between a hospital's responsibility in furnishing medicines, mechanical implements, and so forth, and "its furnishing, at defendant's request, an intern to assist him in the operating room in the discharge of a duty which rested primarily on defendant's own shoulders."

The court also distinguished cases in which it has been decided that surgeons are not liable for negligent postoperative care of patients by hospital nurses or interns while not acting under the doctor's supervision.

The dissenting opinion stressed the point that the majority decision subjected the defendant to liability for the act of the intern, whom the surgeon neither hired nor paid and could not discharge. It also argued that defendant should not be held liable on the same theory that would apply if he were operating in a private hospital owned by him and operated for profit, that it was improper to treat the particular hospital as having lent the intern to the defendant, because it was a charitable institution and could not lend its employees (65 Atl. 2d 243).

¶ The full text of the dissenting opinion should be consulted for an interesting discussion of the transition of obstetrical practice from the old days, when an ironing board in the kitchen of the patient's home served as a delivery table, to the modern technics of delivery in hospital operating rooms.—A.L.H.S.

WIN WITH YOUR WIT
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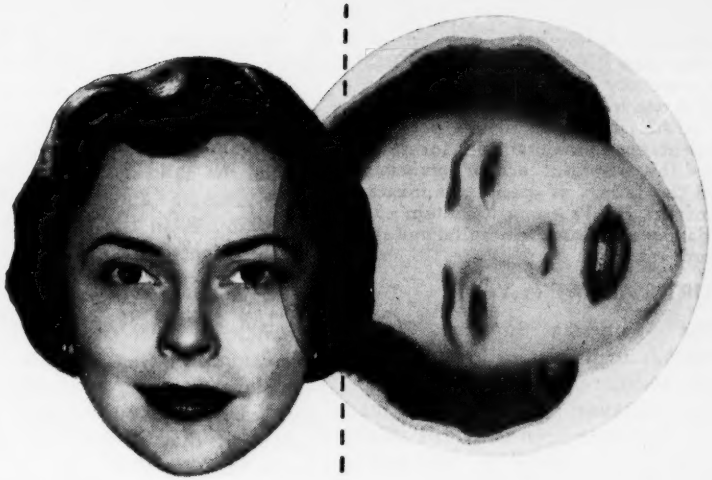

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1–Hansel, F. K.: Ann. Allergy, 5:397, 1947.

PROBLEM: A hospital and an attending physician allegedly caused the death of a maternity patient and her unborn child through inattention. Under a statute authorizing a decedent's personal representative to maintain suit for death caused by wrongful act or omission, could the father, as special administrator of the child's estate, maintain suit for damages against the hospital and the doctor?

COURT'S ANSWER: Yes.

The Minnesota Supreme Court (June 24, 1949) was called upon to decide whether the suit could be maintained, assuming that, as alleged, the child could have been delivered alive, despite the mother's death. The court said:

> There is no question here about the viability of the unborn child, or its capacity for a separate and independent existence. In the light of medical knowledge, it would seem elementary that even though the mother may have died in child-birth the child itself might have been delivered and its life saved through modern surgery.

In support, the court cited a decision of the Supreme Court of Canada to the effect that, after birth, an action can be maintained on behalf of a child for prenatal injuries negligently caused (4 Dom. L. R. 337,344). Another decision cited was rendered by the U.S. District Court, District of Columbia, to the effect that a father could maintain suit on behalf of a child for injuries sustained by the latter, through malpractice in its delivery (65 Fed. Supp. 138).

Numerous decisions have followed that of the Massachusetts Supreme Judicial Court in 1884, written by the late Justice Holmes. In that case it was decided that when a premature birth was due to accidental injury to the mother who had been pregnant less than five months and when the child survived only a few minutes, no action could be maintained on the child's behalf (138 Mass. 14).

When the child has become viable, the Minnesota and Canadian Supreme Courts, in the cases cited, reject the theory advanced by Justice Holmes that an unborn child is to be regarded as a "part of the mother." The federal court distinguishes between an embryo—a fetus in its earliest stages—and a viable fetus—one that "has reached such a stage of development that it can live outside the uterus."

Decisions of the appellate courts of Illinois, Rhode Island, Missouri, Wisconsin, New York, Alabama, Texas, Pennsylvania, and New Jersey have followed Justice Holmes's thesis that an unborn child is to be regarded only as part of the mother

PROBLEM: A state medical board unanimously revoked a physician's license because of professional misconduct. Was the act void because seven of the ten members of the board belonged to the regular school of medicine, whereas the law provided that there should be no more than five belonging to that school?

COURT'S ANSWER: No.

The Michigan Supreme Court's opinion depended largely upon the fact that the statutes provided that seven members of the board should constitute a quorum and that the vote on revocation was unanimous. But, apart from that consideration, the court said that the board, as constituted, was a de facto board—that is, actually functioning although illegally constituted (253 Mich. 601, 236 N.W. 225).

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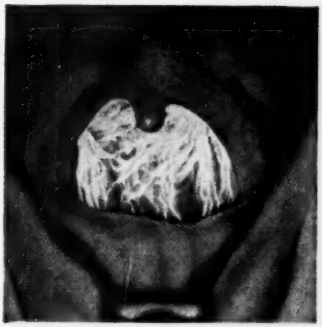

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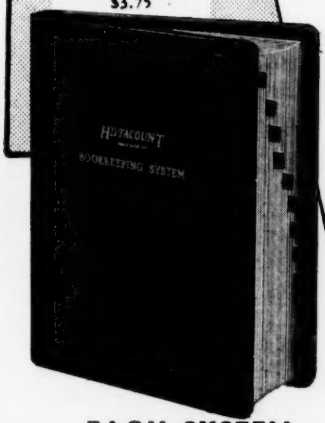

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Questions & Answers

All questions received will be answered by letter directed to the petitioner; questions chosen for publication will appear with physician's name deleted. Address all inquiries to the Editorial Department, MODERN MEDICINE, *84 South Tenth Street, Minneapolis 3, Minnesota.*

QUESTION: What are the possible after effects of acute lithium poisoning?

M.D., Washington

ANSWER: *By Consultant in Internal Medicine.* Review of the literature reveals that very little work has been done recently on the pharmacology of lithium.

Cleaveland, recording his own experiences after taking 8 gm. lithium in 2-gm. doses over twenty-eight hours, states that symptoms persisted for five days after the last dose. Other reports indicate that recovery may take from a week to ten days after discontinuance of the drug. No after effects are reported.

QUESTION: Does epidermidalization of glands in chronic cervicitis predispose to cancer? What is the recommended treatment?

M.D., Massachusetts

ANSWER: *By Consultant in Gynecology.* Epidermidalization refers to the benign growth of vaginal epithelium over the surface of the cervical glands and is usually considered to be a natural attempt to heal an erosion. Therapy of cervicitis by means of cautery or electroconization is adequate. Examinations should be made after treatment although there is no evidence of increased tendency to malignancy with this condition.

QUESTION: A patient who has had epilepsy for four years has been taking 4½ gr. dilantin sodium and ¼ gr. phenobarbital per day. Six months ago a macular skin eruption appeared and is becoming progressively worse. [1] May this eruption be due to the use of dilantin? If so, what would lessen this effect besides reduction of the dose? [2] How long has dilantin been taken continuously without producing toxic effects? [3] What are the possible toxic effects of dilantin? [4] What drug is the best substitute, and what are its possible toxic effects?

M.D., New York

ANSWER: *By Consultant in Neuropsychiatry.* [1] This rare macular eruption is probably not caused by dilantin sodium, since in this case the drug had been used for a long time without reaction. Dermatosis from dilantin is rather frequent, with an incidence of about 5 to 10%. The rash usually appears about the tenth day after beginning the drug and disappears spontaneously.

Phenobarbital may cause a diffuse macular eruption resembling the rash of measles or scarlet fever. This eruption, which may itch, may appear as the cumulative effect of prolonged use of phenobarbital. The outbreak described is probably a delayed manifestation of phenobarbital toxicity and should disappear when the drug is stopped. Another barbiturate may be tolerated. For the relief of itching,

one of the antihistaminic drugs is recommended.

2] Dilantin sodium has been administered to numerous patients since late 1938 without notable skin reaction such as the questioner describes.

3] The most common toxic effects of dilantin sodium include swelling of the gums and disturbance in muscular coordination. The latter consists of tremors of the extended hands, ataxia of gait, nystagmus, and slurring of speech. In some instances there are cerebral manifestations such as irritability, insomnia, and, rarely, symptoms of psychosis.

4] Mesantoin is a satisfactory substitute for dilantin sodium. Dosage must be regulated in accordance with need and with awareness of possible toxic reaction. The drug may produce skin rash, blood changes, and drowsiness.

QUESTION: What is the proper procedure in the use of podophyllin paste, 25%, for the removal of nonvenereal warts around the posterior fourchet? The smallest wart is the size of a pinhead; the largest, the size of a matchhead.

M.D., Ohio

ANSWER: *By Consultant in Detmatology.* Condylomata acuminata can usually be successfully treated by cautious use of podophyllin. The safest method of application seems to be solution of the resin in alcohol or some similar solvent. The solution is safer to use than the ointment because the active ingredient remains better confined to the treated area and is less likely to irritate the surrounding skin. A 15 or 20% solution can be used. Application should not be made oftener than every four or five days. In all cases, a serologic test should be made to exclude the possibility of unrecognized syphilis.

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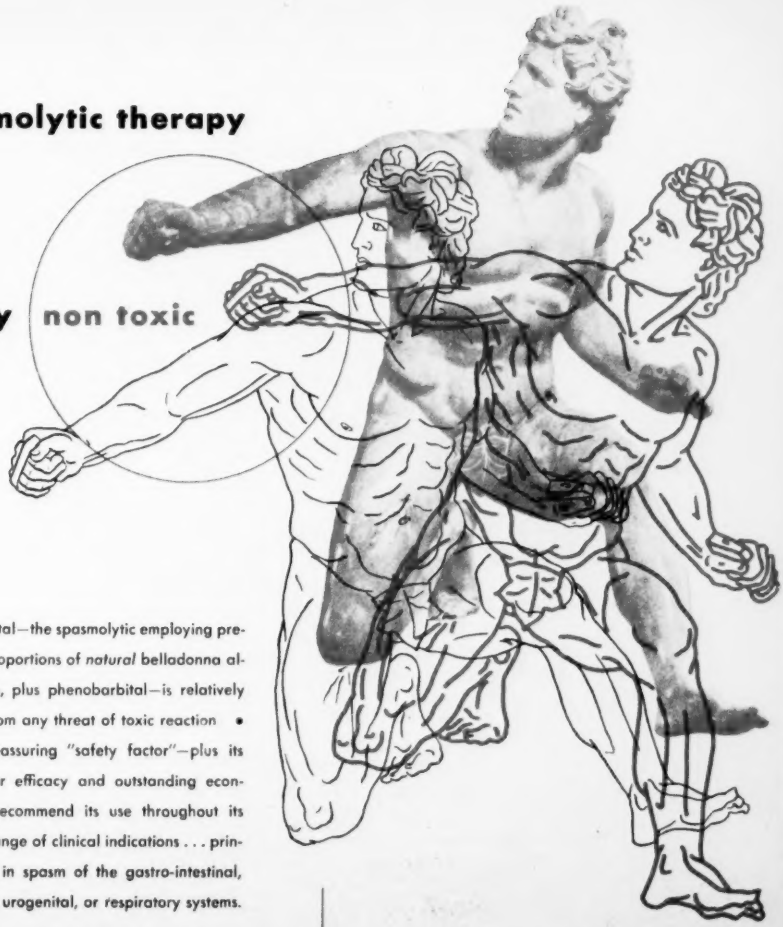
safely non toxic



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QUESTION: Has aludrine been widely used for epinephrine-fast asthma and, if so, has it proved effective?

M.D., Tennessee

ANSWER: *By Consultant in Allergy.* A sympathomimetic amine, aludrine or isuprel, has been available for general use for about a year. The published reports concerning its use in bronchial asthma have been limited, but the value of aludrine in epinephrine-fastness has been mentioned. The response to epinephrine can usually be restored simply by complete removal of all sympathomimetic drugs for a period of forty-eight to seventy-two hours. However, in cases recalcitrant to this form of treatment and until further reports appear, trial of aludrine is advisable before withdrawing sympathomimetic drugs.

QUESTION: What is the treatment for delayed penicillin reaction, appearing seven to ten days after penicillin has been stopped, in which large urticarial lesions are the only pathologic manifestation?

M.D., California

ANSWER: *By Consultant in Dermatology.* Ordinary treatment of urticaria is usually satisfactory for eruptions following penicillin administration. Antihistaminic agents can be given orally; when one is not successful, another may be tried. Adrenalin can be injected two or three times daily if the eruption is sufficiently severe, is associated with considerable edema, or fails to improve with antihistaminic therapy. If the eruption is extensive, the patient will be more comfortable bathing with baking soda, cornstarch, oatmeal, or boiled starch in tepid water several times daily for fifteen to twenty minutes. Carbolized lotions may be used topically.

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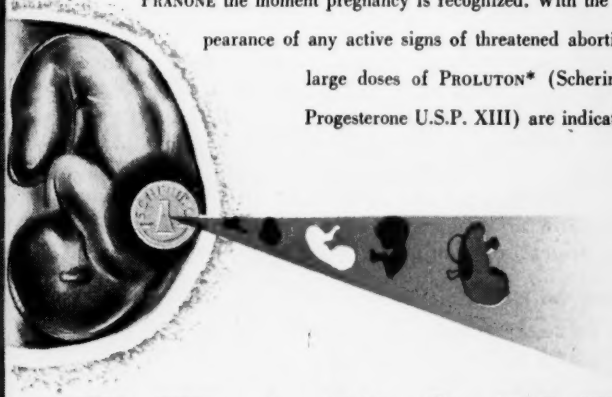

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Washington Letter

Military Medical Service to Be Recognized

The country's military medical organizations can prepare for some jolting information. In a few weeks or less Secretary of Defense Louis Johnson is expected to issue directives to reorganize and greatly unify medical service in the Army, Navy, and Air Force.

The directives will be notification that certain decisions have been made and are to be put into effect without delay.

Within the military organizations, these orders will be final and so definite as to allow no ground for open objection, appeal, or complaint.

Men Behind the Plan

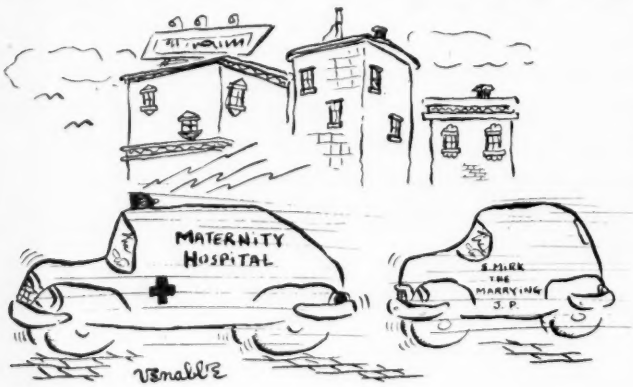
Almost every organization that has interested itself in this situation, including the American Medical Association, has been urging this kind of a shakeup.

The first step came last spring when Secretary Johnson appointed Dr. Raymond B. Allen, president of the University of Washington, to be the director of the National Military Establishment's Medical Services Division with all the necessary authority to eliminate waste, duplication, and major inefficiency of the three services.

Dr. Allen is the possessor of at least eight degrees, including M.D. and Ph.D. He is also a skilled administrator who can get tough when he has to. He has had to with some regularity in the last three months.

Dr. Allen's deputy has been Dr. Richard L. Meiling, who takes charge of the work effective October 1, when Dr. Allen returns to the University of Washington.

Dr. Meiling is forty-one. He spent almost six years in the Army and is a graduate of the Command and General Staff School, an unusual achievement for a medical reserve officer. Until he took over this new assignment, he was assistant professor of obstetrics and gynecology at the Ohio State University.



Drs. Meiling and Allen agree on every important step taken in the re-

(Cont. p. 44)

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INDICATIONS: Rheumatoid arthritis; acute rheumatic fever; fibrositis; gout; osteo-arthritis.

DOSAGE: Average adult dose: two teaspoonfuls or two tablets, three times daily. Dosage for children proportional to age and severity of condition.

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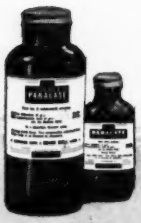

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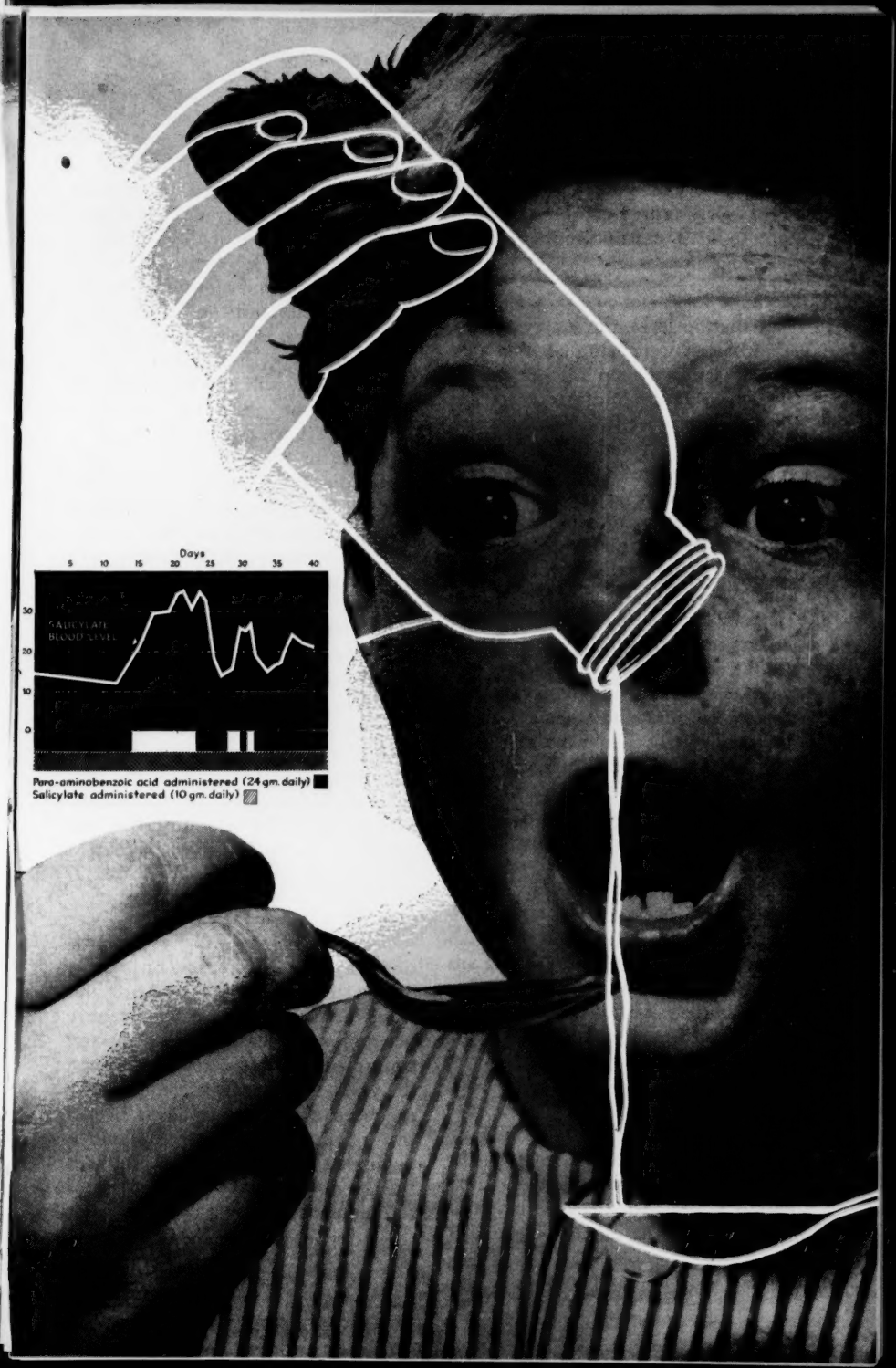
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organization. Thus the shift in command does not mean a change in policy. Dr. Meiling can be depended upon to insist on full compliance with the program.

Firsthand Investigation

At the top level, the survey and reorganization were handled by a staff of half a dozen men who called on the Army, Navy, and Air Force for the help they needed. The first two months were devoted to fact finding, in this country and abroad. Dr. Meiling did not depend on information furnished him by the services. He did his own investigating, or had it done by officers and civilians assigned to him.

When Dr. Allen returned from a ten-day inspection of European facilities the middle of August, he was prepared to start drafting the recommendations. In this, as in all stages of the operation, Dr. Allen worked closely with the Armed Forces Medical Advisory Committee and was in consultation with officials of American Medical Association and American Dental Association.

This report was not made public, but went directly to Secretary Johnson. On the basis of its recommendations, the Secretary is preparing his directives, for release soon. Then, and only then, will the military medical officers learn how drastic is the reorganization.

One person concerned in this work told *Modern Medicine:* "We have been guided by just two standards: first, the welfare of patients in the military services; second, a determination to see to it that the taxpayer gets value for the money he spends."

Permanent Organization

Obviously, no detailed information on the directives is available for publication in advance of the Secretary's announcement. However, some of Dr. Allen's recommendations are known.

One military surgeon general over all the services is not contemplated. The surgeons general of Army, Navy, and Air Force will run their own departments, but within the policy limitations laid down for them.

Under the reorganization act signed by the President in August, the Medical Services Division gets permanent status as Office of Medical Services, Department of Defense.

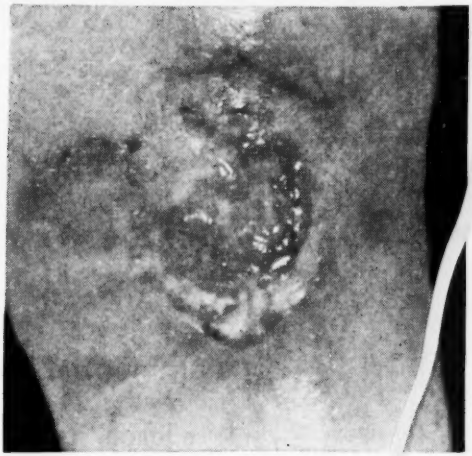
This division, with Dr. Meiling at its head, will continue to lay down policy for the services to follow in their separate operations. It will also lay down rules and regulations which will insure cooperation between the services.

One key to the importance of the reorganization is the fact that the new Office of Medical Services has *administrative* authority to go into the field and require that its orders be carried out.

Chain of Command

One by-product of the reorganization may be a distinct loss of prestige by the surgeons general of Army and Navy. Since 1916 these officers have been appointed by the president and confirmed by the Senate. Through the years, some surgeons general have not been above taking advantage of this relationship. The complaint is made that they have on occasion used this special status to resist orders or recommendations with which they

(Continued on page 116)



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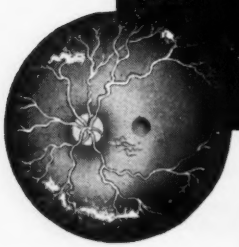
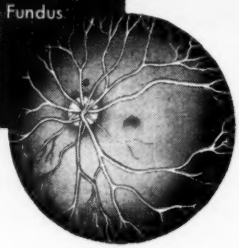
Ocular Fundus in Degenerative Vascular Disease—Hypertension, Diabetes, Arteriosclerosis —note tortuous blood vessels, areas of exudation, hemorrhagic areas.



Normal Ocular Fundus



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Prediction of Thromboembolism

JOHN N. SHADID, M.D.*
Central Dispensary and Emergency Hospital, Washington, D.C.

BLOOD viscosity reflects most, if not all, causes of thromboembolic diseases and may be a useful aid in determining treatment.

John N. Shadid, M.D., has developed a simple bedside test to determine blood fluidity which he has used satisfactorily with 102 individuals, of whom 16 suffered from thromboembolic disease. The test gives a viscosity index relating the drip rate of blood to that of distilled water.

Prediction of thromboembolic complications has been verified in 2 cases on the basis of maintained high viscosity. Short-time abnormal increases may occur in some postoperative patients, but are usually of little significance.

High viscosity figures may vary widely in the same individual, but all will be definitely above normal. Likewise, normal figures may vary in the same person, but all will give a viscosity index of not more than 6.

A tuberculin syringe barrel and a 25-guage, ½-in. stainless steel needle are used and should first be standardized with distilled water at 25° C. and marked. For about two minutes before the test, the syringe, with plunger inserted, is warmed in the palm. Skin over the antecubital vein is wiped with alcohol and allowed to dry. A tourniquet is applied and the vein entered with the least possible trauma.

Blood is drawn into the tuberculin syringe barrel to the 1-cc. mark. The contained blood is held vertically and the time for 15 drops to fall noted with a stop watch. Suction from a ¼-oz. rubber bulb adapted to fit an open syringe end is used instead of a plunger for more exact control. Syringes should be of identical calibers with the 1-cc. mark the same distance from the tip to provide equal pressures for forcing out fluid.

Blood viscosity, obtained by dividing the time taken for delivery of 15 drops of distilled water into that taken for 15 drops of blood, may vary between 4 and 5.5 in apparently normal individuals, the lower figure usually being associated with slight anemia. With known thromboembolic disease viscosity is increased from 7.5 to a point where blood clots in the tube.

A result is not considered to be abnormal unless indexes are the same in at least three tests. The same needle and syringe should be used for each series of tests to lessen possibility of technical error.

Great care and conscientious cleaning of equipment are essential. After

* A simple blood viscosity test for thrombo-embolism. M. Ann. District of Columbia 18:285-289, 332-333, 1949.

a test the apparatus is thoroughly washed with cold water to remove any traces of blood. The syringe is filled with hydrogen peroxide and corked. The needle bore is scraped and defects which could influence free blood flow are removed. Pipe cleaners with folded tips are effective for scrubbing with detergent. Chemical sterilization prevents bore changes from heat.

Urine Pigment Test of Metabolism

JEFFERSON J. VORZIMER, M.D., IRA B. COHEN, M.D., AND JULES JOSKOW, M.A.*

THE basal metabolic rate is accurately shown by the ratio of urine pigment to creatinine excretion. An easy, reliable test is described by Jefferson J. Vorzimer, M.D., Ira B. Cohen, M.D., and Jules Joskow, M.A., of Beth Israel Hospital, New York City.

The method may be used when the results of respiratory calorimetry are doubtful, as with alcoholism or pregnancy. Urochrome formation represents true basal oxygen consumption, creatinine output is a quantitive index of body tissue and muscle metabolism.

The output of urinary pigment is remarkably constant during good health and is unrelated to diet. Amounts are increased by hyperthyroidism, fever, action of thyroxin or epinephrine, tissue breakdown, starvation, or administration of acids and diminished by thyroidectomy and alkalinization.

Daily creatinine excretion, also constant for the subject, is not influenced by ordinary exercise, dietary protein, or urine volume. Output, which represents about 2% of body creatinine, varies from 1.5 to 2 gm. daily for men and from 0.8 to 1.5 gm. for women. The ratio of milligrams of creatinine excreted per day to kilograms of body weight is 20:26 for men and 14:22 for women.

To find the urochrome value, urine voided after an hour's rest is centrifuged and placed in a 10- by 75-cm. cuvette. Percentage of light transmission at a wave length of 420 $m\mu$ is measured with a Coleman Junior spectrophotometer.

Creatinine is determined by a variant of the Jaffé reaction. In the cuvette are placed 0.1 cc. of urine diluted 1 to 5 with distilled water, 2 cc. of saturated picric acid, and 0.15 cc. of 10% sodium hydroxide. Light transmission at a wave length of 520 $m\mu$ is plotted against dilutions of a standard creatinine solution.

For men, BMR=57+0.25 pigment/creatinine.

For women, BMR=54.7+0.22 pigment/creatinine.

* The use of urinary pigment excretion for the measurement of basal metabolic rate. J. Lab. & Clin. Med. 34:482-486, 1949.

Pentothal Therapy for Chronic Alcoholism

FREDERICK LEMERE, M.D., AND PAUL O'HOLLAREN, M.D.*
University of Washington, Seattle

PATIENTS who drink for escape from nervous tension or because of an emotional instability are usually helped by pentothal narcosynthesis.

These patients are referred to as secondary alcoholics in that their drinking is secondary to personality defect, usually a neurosis.

Frederick Lemere, M.D., and Paul O'Hollaren, M.D., suggest the following criteria be used in choosing patients who will be benefited by pentothal therapy:

- Alcohol taken as an escape from nervous tension or emotional strain
- Age under thirty years
- Psychopathic personality, psychosis, or neurosis
- Criminal record
- Relapse after other forms of treatment

The conditioned reflex treatment with emetine is usually employed in conjunction with pentothal therapy.

The procedure for pentothal narcosynthesis consists of two or three prolonged interviews every day or two. Pentothal, 2 gm., is dissolved in 200 cc. of sterile water and given by intravenous drip. The depth of narcosis is regulated by the rate of drip and should be maintained at a level deep enough to insure amnesia during the interview.

For subsequent interviews of shorter duration pentothal is given by syringe. The frequency of the short interviews is determined by the degree of nervousness of the patient. The usual schedule is once a week for a few weeks followed by gradual prolongation of the interval between interviews.

During narcosynthesis, strong suggestion toward avoidance of alcohol is made as well as a psychiatric approach to the patient's underlying psychologic disorder.

In a few cases intravenous barbiturates make the patient wild and unmanageable. An occasional febrile response occurs. Pentothal interviews are contraindicated in instances such as these.

Pharmacologic benefit from pentothal itself is probably as important as the psychologic effects of the interview. Many patients given pentothal combined with little or no psychotherapy appear greatly improved. Relaxation and loss of nervous tension often occur after administration of pentothal alone.

Primary alcoholism, on the other hand, is not an indication for pentothal therapy unless relapses occur. The conditioned reflex method employing emetine is recommended. A primary alcoholic appears to be normal except for his in-

* Treatment of chronic alcoholism by intravenous barbiturates. Northwest Med. 48:482-484, 1949.

tolerance to alcohol. When sober, these patients with primary alcoholism are able to adjust adequately to life. Nervous tension and emotional strain play little or no role in their alcoholic problem. However, other patients who have any physical contraindications to emetine, such as cardiac disease, should not be given the conditioned reflex treatment.

Complications of Gold Therapy

WILLIAM C. KUZELL, M.D.*

CHRYSOTHERAPY for rheumatoid arthritis may cause toxic reactions and should be given with caution. Effects may appear as an initial hypersensitivity or serious cumulative poisoning.

Gold intoxication may be prevented by careful dosage, routine tests for early effects, temporary withdrawal of the metal, or injection of British antilewisite. To counteract harmful action of Bal, William C. Kuzell, M.D., of Stanford University, San Francisco, administers the drug as a glucoside with doses of methionine.

Most frequent reactions to gold are dermatitis and stomatitis. Numerous possible effects include fever, joint symptoms, purpura, agranulocytosis, and gastrointestinal, liver, or kidney disorders. In most cases reactions subside after the first few treatments.

Most satisfactory method of administration is weekly intramuscular injection of sodium aurothiomalate or aurothioglucose in amounts gradually increased from 10 to 50 mg. Liver function is determined before the course, and blood cells are counted before and after the first injection. Blood and urine are examined every two to four weeks. Before each injection, inquiry should be made whether itching, nausea, jaundice, diarrhea, or other ailment has occurred.

If toxic manifestations continue after six injections, gold is omitted for several weeks, then resumed with smaller doses or a different preparation. If symptoms recur, gold is stopped for several months.

Bad effects may become steadily worse after discontinuance of the metal. A trial dose of Bal-glucoside, 0.5 cc. of 10% suspension in oil, should be injected intramuscularly. If no reaction follows, 0.025 cc. per kilogram of body weight is given four to six times daily for two days and twice daily for ten days or until recovery. From 1 to 2 gm. of methionine is taken orally four times a day.

Contraindications to gold therapy are agranulocytosis, purpura, hemophilia, hemorrhagic anemia, kidney or liver disease, severe diabetes, pregnancy, congestive heart failure, eczema, and colitis.

* Complications of gold therapy and their management. California Med. 71:140-143. 1949.

A LOW-SALT DIET is satisfactorily regulated with a simple home test of sodium chloride excretion. The technic of Fantus is modified for hypertensive and cardiac cases by J. Marion Bryant, M.D., and co-workers of the University of Michigan, Ann Arbor. Once daily a 10-drop sample of urine is shaken in a 5-cc. Kahn test tube with a drop of 10% potassium chromate solution. Silver nitrate in 0.73% solution is then added drop by drop until the mixture turns light brown or brick red. With fluid intake of 1 to 3 liters daily and sodium intake of 200 mg., or not over 1.5 gm. of sodium chloride, the end point is reached with 1 to 6 drops.

J.A.M.A. 140:670-672, 1949.

VITAMIN B_{12} FROM STREPTOMYCES GRISEUS has the same effect on pernicious anemia in relapse as vitamin B_{12} from liver. Physical and chemical properties are also similar, indicating that the substances are closely related or identical. With equivalent dosage, the fungous product seems to act more rapidly, report Lowell A. Erf, M.D., and Bruce Wimer, M.D., of Jefferson Medical College, Philadelphia. Although the vitamin contains cobalt, the cobaltous ion appears to be inactive.

Blood 4:845-862, 1949.

EXTRACELLULAR FLUID IN OBESE WOMEN is less than in women of ordinary weight. Employing the sodium thiocyanate method of Odier, René Canon, M.D., of the University Hospital and Laboratory of Experimental Gynecology, Brussels, found that extracellular fluid constituted about 18% of body weight for overweight women, in contrast to about 24% for nonobese women. In one group of patients fat was due to overeating. In the other, metabolism was deranged and the surplus apparently resulted from salt and water retention.

Presse méd. 46:657, 1949.

STAPHYLOCOCCIC BACTEREMIA resistant to penicillin may be eradicated by aureomycin. The substance was given to 6 patients at the Mayo Clinic who had not been helped by penicillin or other chemotherapy; 4 recovered. All of fifteen strains of *Staphylococcus aureus* recovered from patients were inhibited by aureomycin but twelve were unaffected by penicillin. To start the course, Donald R. Nichols, M.D., and Gerald M. Needham, Ph.D., of Rochester, Minn., usually employ intravenous administration. From 200 to 500 mg. is given in 250 cc. of physiologic saline solution two, four, or six times daily. Later 0.5 to 1 gm. is taken orally every four to six hours.

Proc. Staff Meet., Mayo Clin. 24:309-316, 1949.

Intrathoracic Extrapulmonary Tumors

STUART W. HARRINGTON, M.D.*
Mayo Clinic, Rochester, Minn.

In recent years, chest roentgenograms made in mass surveys have brought to light a surprisingly large number of intrathoracic extrapulmonary growths.

The incidence of these lesions, according to Stuart W. Harrington, M.D.,* is probably not increasing, but the routine use of x-ray examination of the thorax for diagnosis has resulted in the recognition of many tumors that would formerly have remained undetected.

The potentially malignant character of intrathoracic extrapulmonary lesions dictates early excision. Moreover, even benign growths should be removed before vital structures in the thoracic cavity are damaged by pressure from the enlarging tumor. The discovery of such growths before the patient's general condition has been affected, and often before subjective symptoms appear, allows curative surgical removal.

The nature of the tumor is often indicated by its location.

Tumors of the *anterior mediastinum* are usually teratomas, though thymic tumors and cysts are also found in this region. Because of the small space, growths in the anterior mediastinum are apt to cause discomfort. Pain is a usual accompaniment and if the lesion is cancerous is particularly severe and finally constant. With benign tumors, the patient ordinarily feels pressure beneath the sternum and has dyspnea on effort. Associated inflammation of the respiratory tract is common and may be responsible for wrong diagnosis such as pleurisy, pneumonia, or influenza.

Teratomas occur occasionally in the *posterior mediastinum,* but the most frequent dorsal growths are perineural fibroblastomas or neurofibromas, which may also appear along the course of nerves in the lateral chest wall and spinal column. Unless the tumor is malignant, pain and other symptoms rarely occur, even when the hemithorax is almost filled. Dyspnea may be pronounced and swallowing difficult if the growth is in the upper part of the posterior mediastinum.

The most common tumors of the *middle mediastinum* are lymphoblastomas and aneurysms. These are not amenable to surgery, hence great care in diagnosis is necessary.

Tumors often fill the entire space in the *superior mediastinum* and are difficult to distinguish from the surrounding viscera. Most frequent are thymomas, intrathoracic goiters, neuroblastomas, aneurysms, and cysts.

Stereoscopic roentgenograms of the thorax as well as films made in anteroposterior, lateral, and oblique positions may be more helpful than bronchoscopic, esophagoscopic, and thor-

* Intrathoracic extrapulmonary tumors: diagnosis and surgical treatment. Postgraduate Med. 6:6-21, 1949.

acoscopic examinations, especially in the selection of growths for operation and in determining the most accessible surgical approach. Roentgenograms made after production of artificial pneumothorax or introduction of barium into the esophagus or of iodized oil into the bronchial tree may give valuable information.

Roentgen therapy, which rapidly diminishes radiosensitive tumors, is of aid in diagnosing mediastinal lymphoblastomas. Shrinkage of these inoperable masses is detected in films a week after initial x-ray therapy.

Of 168 patients with intrathoracic extrapulmonary tumors, 161 recovered from the operation. The results for 128 with benign lesions were satisfactory. Symptoms were relieved and tumors have not recurred. Half of the 33 malignant tumors recurred, and the patients subsequently died of malignant disease.

Complications of Gastrointestinal Intubation

JOHN S. CHAFFEE, M.D.*

MORE and more commonly the gastrointestinal tract is intubated for aspirating, deflating, feeding, studying, and treating. John S. Chaffee, M.D., of Hamot Hospital, Erie, Pa., presents a collective review of the complications of such intubations.

Sinusitis and otitis media often occur when indwelling nasal tubes are used. Intubation should be avoided if the patient has acute sinusitis or head cold.

Esophageal strictures sometimes attend prolonged intubation. This complication must be borne in mind when dysphagia develops.

Laryngeal obstruction may occur after esophageal intubation. The onset of the obstruction may be acute or insidious. Warning symptoms are dyspnea, dysphagia, hoarseness, blood-streaked sputum, and croupy cough.

Knotting of the tube should be suspected when intestinal drainage is unsatisfactory.

Rupture of esophageal varices can attend gastrointestinal intubation. The presence of cirrhosis of the liver with the possibility of esophageal varices is a contraindication.

Rupture of a hollow viscus may be avoided if the position of the tip of the tube is changed daily.

Inability to withdraw a balloon-tipped tube may result from occlusion of the air conduit to the bag. Patency of the air channel and free communication with the balloon should be checked daily.

Breakage of the mercury-filled bag is a frequent occurrence but is without ill effects.

* Complications of gastro-intestinal intubation. Ann. Surg. 130:113-123, 1949.

Surgical Treatment of Aneurysm

GERALD H. PRATT, M.D.*
New York University, New York City

No single operation is effective for all arterial and arteriovenous aneurysms. Treatment must be individualized.

The best procedure may be excision of the sac with end-to-end anastomosis by venous transplant. In other cases suture of inner orifices and insertion of a core will be preferable. In still others the method of choice may be proximal ligation, distal shunt to a large vein, or obliteration by an external irritant such as talcum powder.

Arterial varices syndrome often mistaken for varicose veins, results from innumerable small vessels between the femoral artery and saphenous system. Gerald H. Pratt, M.D., emphasizes the point that, like cancer, congenital arteriovenous connections may suddenly become very active and continue to spread, regardless of operation. The lesion is difficult to eradicate. All involved branches should be widely removed.

ARTERIAL ANEURYSM

Most arterial dilatations are traumatic or degenerative. A small sac due to injury is usually excised and the cut ends are joined with fine silk. A large gap left in a vital artery is bridged with a section of vein sutured in place. A tube lined with vein may be life saving but is more likely to produce rupture.

When anastomosis is impossible the Matas technic, which does not destroy collateral circulation, is often successful. The aneurysm is opened and internal orifices are sutured. The sac is then filled with a large contiguous muscle and closed over the core.

Aortic aneurysm below the renal arteries may be obliterated by proximal ligation with two cotton tapes. The distal tape is tied first, the aorta incised between the two, a plug of fascia inserted, and the proximal tape tied over the end. The implanted tissue absorbs the shock of occlusion and pressure of the knot, thus preventing erosion and rupture.

Pressure from within an aneurysm can be reduced by hastening the flow of blood. Just beyond the sac the artery is anastomosed to a vein, so that blood returns directly to the heart instead of meeting peripheral resistance. The method is used with thoracic and iliac dilatations.

Reaction to cellophane or talcum powder around the aorta produces ideal slow occlusion in healthy tissue but less satisfactory results with disease. In some cases other vessels may be irritated.

ARTERIOVENOUS ANEURYSM

Excision and end-to-end anastomosis are done for minor lesions, especially of end arteries.

An artery may be repaired through the venous wall or the sac. The vein

* Surgical treatment of aneurysms. Am. Heart J. 38:43-53, 1949.

is tied and severed, excess aneurysmal wall removed from the artery, and the opening closed to form a normal lumen.

Arteriovenous aneurysm is most effectively removed by ligation with excision of all structures involved. Numerous vessels are usually encountered; hence the term quadrilateral ligation is a misnomer. The Matas obliteration procedure is occasionally suitable.

ARTERIAL VARICES SYNDROME

Congenital arterial varices may open after many years of closure. The syndrome should be considered if the patient is young, veins are suddenly and extensively enlarged on the lateral and posterolateral surface of the legs, local heat is increased, and the condition promptly returns after the usual procedures for varicose veins. In doubtful cases veins may be incised and arterial pulsations noted.

The saphenous veins should be excised, with branches in the groin and popliteal space and each arterial tributary. Parts are also taken at all incompetent points. Dilated veins on the lateral or popliteal area may be removed extensively and repeatedly.

Once or twice every year the legs should be inspected for recurrence, large dilated vessels cut out, and small vessels injected.

Postoperative Red Cell Deficit

JOSEPH R. STANTON, M.D., AND ASSOCIATES*

BOTH during and after operation more blood may be lost than is shown by ordinary methods. Even though the loss at operation is replaced, an insidious and greater loss may occur later.

With slow internal hemorrhage as much as 1,200 cc. may be lost gradually without significant change of pulse or blood pressure. Uncompensated internal bleeding may delay convalescence and produce air hunger, disorientation, coma, transient blindness, oliguria, or coronary thrombosis and myocardial infarction.

Unsuspected red cell deficiency often continues for weeks after fluid volume is restored, sometimes causing serious reactions. As a guide to replacement, hematocrit levels should be determined before surgery and on the third postoperative day. If the value falls 5 mm., uncompensated loss of whole blood exceeds 500 cc.

In determining erythrocyte levels, Joseph R. Stanton, M.D., Richards P. Lyon, M.D., Edward D. Freis, M.D., and Reginald H. Smithwick, M.D., of Boston University, used hematocrit and the highly accurate thiocyanate technic. In addition, blood removed at operation was estimated by the usual calorimetric and gravimetric methods.

* Operative and postoperative blood loss with particular emphasis upon uncompensated red cell loss. Surg., Gynec. & Obst. 89:181-190, 1949.

Pre- and Postoperative Care of Hyperthyroidism

W. R. LOVELACE, M.D.*
Lovelace Clinic, Albuquerque, N.M.

FROM the time toxic goiter is discovered, internist and surgeon cooperate in planning treatment. Rules of diet, medication, and handling of postoperative complications are described by W. R. Lovelace, M.D., as follows:

Operative risk is determined by age, duration of illness, weight loss, pulse rate and pressure, record of crises, and heart condition. Laryngoscopic examination is done and a specialist is consulted, if necessary.

At least 3,000 cc. of fluid daily is required before operation, in addition to replacement for diarrhea, vomiting, sweating, or fever. If the amount swallowed is inadequate, 5 or 10% dextrose in distilled water is injected. A blood transfusion of 1,000 cc. may be advisable.

Extra food is prescribed according to increase of basal metabolic rate. For example, to maintain weight, a man with metabolic rate of plus 50 doing muscular work would need 6,000 calories daily. Tea, coffee, tobacco, and alcohol are forbidden. Disturbed liver function improves with a high-carbohydrate, low-fat diet containing 25% protein. The heart is protected by supplementary vitamin B complex and ascorbic acid.

If exophthalmos prevents eyelids from closing, the eyes are kept moist with unventilated goggles. Ringer's ointment is dropped in each eye four or five times a day.

Lugol's solution is administered for ten days to three weeks before operation in three daily doses of 10 minims. Propylthiouracil is needed in about 10% of cases because of unusually high metabolic rate, large thyroid, or poor general condition. The dose is 300 mg. daily in most cases, but 1 in 4 requires 400 mg., and a few up to 700 mg.; in addition Lugol's solution is given for two weeks.

With liver dysfunction, a high proportion of oxygen is given during gas anesthesia and high concentrations postoperatively by mask or tent. Oxygen therapy is also necessary if the goiter is very toxic. Anoxia is shown by confusion, agitation, lassitude, headache, tremor, or increase of temperature, pulse, and breathing rate.

After thyroidectomy a semisitting position in bed is most comfortable. From 1/6 to 1/4 gr. morphine may be given every three hours or 1½ gr. nembutal to induce sleep.

In the first proctoclysis 40 drops of Lugol's solution is introduced in 500 cc. of tap water; 1,500 cc. of saline solution with 5% dextrose is injected by vein. If laryngoscopic examination shows normal vocal cords, cool water may be drunk. In case of nausea, intravenous fluids are given daily in amounts 1,000 cc. beyond output.

* Pre- and postoperative care of the patient with hyperthyroidism. J. Internat. Coll. Surgeons 12:305-309, 1949.

Iodine is later administered in fruit juice in three daily 10-minim doses.

If hemorrhage occurs after thyroidectomy, blood usually accumulates under the prethyroid muscles, obstructing breathing and swallowing. The bleeding vessel must be isolated and tied.

Tracheitis is shown by frequent attempts to clear the throat, hoarseness, cough, dyspnea, and tenacious mucus. Steam should be inhaled and warm fluids taken; tracheotomy may be necessary for progressive edema.

Thyroid crises are overcome by concentrated oxygen therapy, ice packs, morphine, nembutal, 10% dextrose in distilled water, iodine by hypodermoclysis or intravenous rectal injection, and transfused whole blood.

Paralysis of the recurrent laryngeal nerve, the usual cause of tracheal obstruction, may require only helium and oxygen therapy, or prompt tracheotomy.

Parathyroid tetany may be overcome by 2 to 4 gm. of calcium lactate given in hot water every two to four hours, 2 or 3 tsp. of cod-liver oil daily, or viosterol. In severe cases 5 cc. of 10% calcium chloride or calcium gluconate solution is administered in 100 cc. of normal saline solution, and parathyroid extract is given once daily, 10 to 50 units intramuscularly. Dihydrotachysterol has a more sustained effect.

Liquid food is given the second postoperative day, a soft diet on the third, and high-carbohydrate, high-protein meals thereafter. The wound is dressed twenty-four hours after operation and the drain removed then or next day. Skin sutures are removed the fourth day. The patient arises the first or second day after surgery and leaves the hospital on the fifth.

Lugol's solution is continued for a month or two, then stopped if metabolic rate is normal. Examination is repeated every two or three months for a year.

Hormone Therapy for Mumps Orchitis

ARCHIBALD L. HOYNE, M.D., AND ASSOCIATES*

USUALLY mumps orchitis can be prevented or greatly modified by giving diethylstilbestrol soon after onset of parotitis. For prophylaxis, 2 mg. is given by mouth every morning throughout the course of illness. If testicles are already involved, 5 mg. is administered daily until the orchitis subsides. Archibald L. Hoyne, M.D., Jerome H. Diamond, M.D., and Joseph R. Christian, M.D., followed this regime in successful treatment of 64 men at the Cook County Contagious Disease Hospital, Chicago.

Incidence of orchitis was reduced from 1 in 4 or 5 cases to 1 in 25. If the complication is already present, recovery occurs in three to five days.

* Diethylstilbestrol in mumps orchitis. J.A.M.A. 140:662-665, 1949.

Special Exhibit

Crystalline Vitamin B_{12} in the Treatment of Megaloblastic Anemias

E. SCHMATOLLA, M.D., A. GIBSON, M.D., AND J. M. CARLISLE, M.D.
Rahway, N. J.

THE classic studies of Minot and Murphy initiated a new era in the treatment of pernicious anemia. Today, slightly more than two decades later, the physician has at his command a pure anti-anemia factor. Weight for weight, this is the most potent therapeutic substance known to medicine.

Crystalline vitamin B_{12}—a pure anti-anemia factor—was first isolated in the Merck Research Laboratories, as described in *Science* 107:396-397, 1948.

HEMOPOIETIC AND OTHER ACTIVITY

Crystalline vitamin B_{12} is a highly effective substance capable of producing hemopoietic activity in patients having those types of anemia characterized by erythrocyte maturation arrest. As little as one microgram (0.000001 gm.) daily of this substance is sufficient to effect and maintain remission in pernicious anemia. Crystalline vitamin B_{12} is also an essential growth factor for certain species of animals (e.g., chicks, pigs).

NONALLERGENICITY AND NONTOXICITY

Crystalline vitamin B_{12} may be given with complete safety to those 3 to 5% of patients who react, often violently, to liver extract. No allergic reactions of any type have occurred following the use of saline solution of crystalline vitamin B_{12}. Saline solution of crystalline vitamin B_{12} causes no induration and little or no discomfort at the site of injection. No toxic effects have followed its administration in therapeutic doses.

CLINICAL INDICATIONS

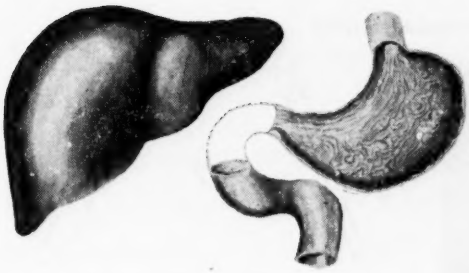
Crystalline vitamin B_{12} is effective in microgram quantities in the treatment of: uncomplicated pernicious anemia; pernicious anemia with nervous system complications (subacute combined degeneration of the spinal cord); tropical and nontropical sprue; nutritional macrocytic anemia; certain cases of megaloblastic anemia of infancy; patients with any of these disorders who are sensitive to liver extract.

Adapted from the Scientific Exhibit presented at the 1949 convention of the American Medical Association, Atlantic City, N. J.

PATHOGENESIS OF THE MEGALOBLASTIC ANEMIAS

DUE CHIEFLY TO DEFICIENCY OF THE ERYTHROCYTE MATURATION FACTOR

Deficiency may be caused by:



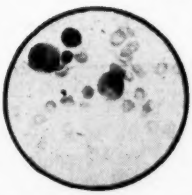
Lack of extrinsic factor in the diet (nutritional macrocytic anemia). Failure of the gastric mucosa to form intrinsic factor (pernicious anemia, postgastrectomy macrocytic anemia).

Defect in absorption of extrinsic factor as in intestinal disorders (sprue, steatorrhea).

Inability of the liver to store the erythrocyte maturation factor (hepatic disease)?

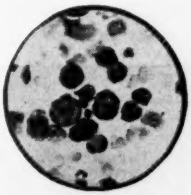
Deficiency results in:

ABNORMAL RED BLOOD CELL MATURATION



Normal bone marrow

Primitive stem cell



Megaloblastic bone marrow from untreated pernicious anemia patient

Proerythroblast

Promegaloblast

Erythroblast

Megaloblast

Normoblast

(Relatively few develop into mature red cells to be released into the peripheral blood—"maturation arrest.")

Polychromatic megaloblast

Reticulocyte

Abnormal red blood cells

Erythrocyte

NORMAL MATURATION

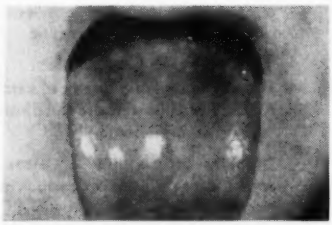
ABNORMAL MATURATION

DIAGNOSIS OF PERNICIOUS ANEMIA

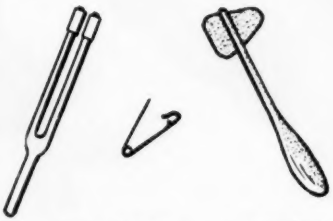
HISTORY

Sore tongue	Mental changes	Tingling	Palpitation
Diarrhea	Weakness	Unsteady gait	Tinnitus
Anorexia	Numbness	Dyspnea	Dizziness

PHYSICAL SIGNS

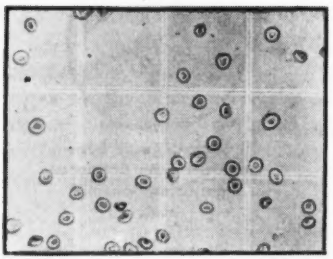


Beefy red tongue
Pallor of skin and mucous membranes
Lemon-yellow tinge of skin



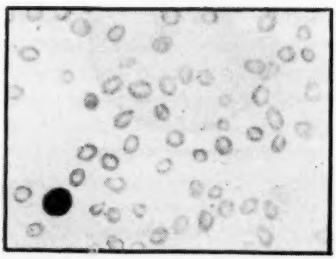
Impaired vibration sense; impaired position sense; impaired pinprick sensation; hyper-reflexia of tendon reflexes, Babinski, Hoffman, etc.

LABORATORY TESTS

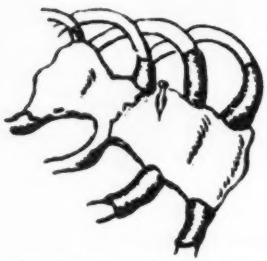


Low red blood count

Low hemoglobin

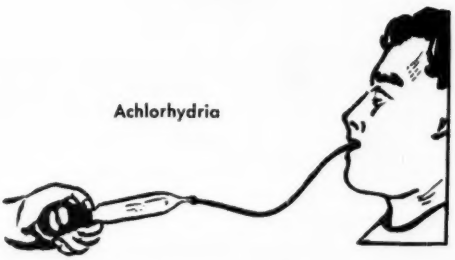


Macrocytosis; anisocytosis; poikilocytosis; polychromatophilia; basophilic stippling; occasional nucleated red cells.



Megaloblastic hyperplasia in marrow smear

Achlorhydria



THE TREATMENT OF MEGALOBLASTIC ANEMIAS

First Used	*Medication*	*Average daily dose*
1926	Oral liver	200 gm.
1928	Parenteral refined liver extract	1 U.S.P. unit
1929	Oral dessicated hog's stomach	25 gm.
1945	Pteroylglutamic acid	0.005 gm.
1949	Crystalline vitamin B_{12} (Cobione)	0.000001 gm.

CLASSIFICATION OF THE MEGALOBLASTIC ANEMIAS

(Anemias characterized by erythrocyte maturation arrest)

- Macrocytic anemias associated with gastrointestinal disorders:
  Sprue (tropical and nontropical)
  Idiopathic steatorrhea
  Celiac disease
  Chronic pancreatic disease
  Regional ileitis
  Gastrectomy
  Carcinoma of the stomach
  Gastroenterostomy
- Pernicious anemia
- Nutritional macrocytic anemia
- Cirrhosis of the liver
- Fish tapeworm infection *(Diphyllobothrium latum)*
- Megaloblastic anemia of infancy
- Macrocytic anemia of pregnancy

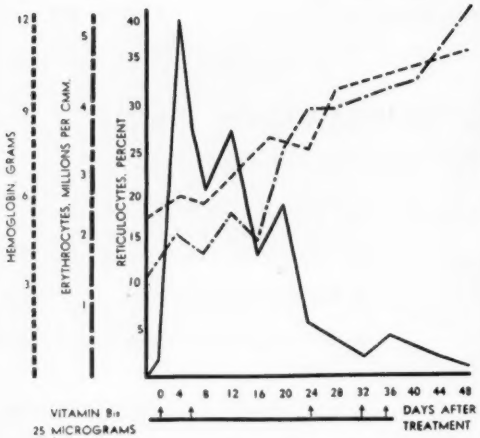
NEUROLOGIC RESPONSE IN PERNICIOUS ANEMIA TO VITAMIN B_{12} THERAPY

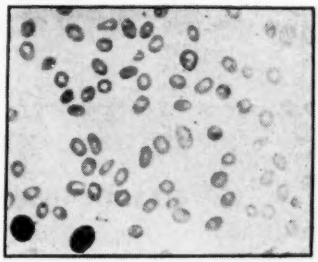
(5 micrograms intramuscularly daily for eight days, then 15 micrograms weekly)

Symptom or sign	*Before therapy*	*After 3 wks. of therapy*	*After 6 wks. of therapy*	*After 9 wks. of therapy*
NUMBNESS				
Hands	Present	● ABSENT	● ABSENT	● ABSENT
Feet	Present	Present	● ABSENT	● ABSENT
PINPRICK SENSE				
Fingers	Impaired	● NORMAL	● NORMAL	● NORMAL
Feet	Impaired	● NORMAL	● NORMAL	● NORMAL
Toes	Impaired	■ IMPROVED	■ IMPROVED	● NORMAL
VIBRATION SENSE				
Patella	Impaired	● NORMAL	● NORMAL	● NORMAL
Tibia	Impaired	Impaired	● NORMAL	● NORMAL
Malleolus	Impaired	Impaired	Impaired	● NORMAL
POSITION SENSE				
Toes	Impaired	■ IMPROVED	■ IMPROVED	■ IMPROVED
PLANTAR REFLEXES	Babinski	● NORMAL	● NORMAL	● NORMAL
TENDON REFLEXES	Hyperactive	● NORMAL	● NORMAL	● NORMAL
ATAXIA	Present	■ IMPROVED	■ IMPROVED	● NORMAL
ROMBERG'S SIGN	Present	Present	Present	● NORMAL

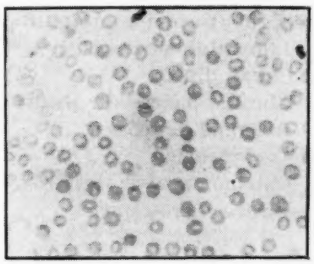
RESPONSE TO VITAMIN B_{12} THERAPY

Typical hematologic response of patient with pernicious anemia in relapse to treatment with vitamin B_{12}





Peripheral blood before treatment



Peripheral blood after treatment

INDICATIONS AND DOSAGE FOR CRYSTALLINE VITAMIN B_{12}

By subcutaneous or intramuscular injection

	Initial	*Maintenance*
Pernicious anemia (uncomplicated)	15 micrograms once or twice a week till remission occurs	15 micrograms every other week
Pernicious anemia with neurologic complications	15 to 30 micrograms once or twice a week till a maximum response has been obtained	15 micrograms every other week
Pernicious anemia in patients sensitive to liver preparations	15 micrograms once or twice a week till remission occurs	15 micrograms every other week
Sprue (tropical and non-tropical)	15 to 30 micrograms once or twice a week	15 micrograms every other week when needed to prevent relapse
Nutritional macrocytic anemia (certain cases)	A single injection of 15 micrograms	15 micrograms once a week may be required to prevent relapse
Megaloblastic anemia of infancy (certain cases)	A single injection of 15 to 30 micrograms	If response is not prompt other therapeutic measures should be employed at once

A New Ocular Implant

NORMAN L. CUTLER, M.D.*
Wilmington, Del.

A PROSTHETIC ocular implant should allow wide range of motion and instantaneous movements over a short range. In addition, the upper lid must be kept from sinking in and the lower lid should be prevented from sagging.

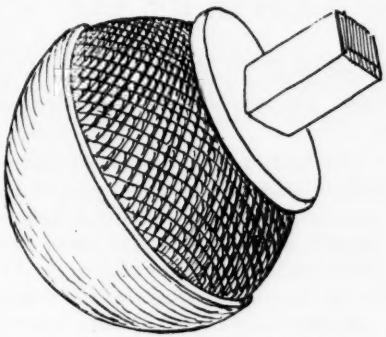


Fig. 1. Universal type of implant

These qualifications are met by a plastic ocular implant employed by Norman L. Cutler, M.D. The implant (Fig. 1) is ball-shaped and measures 18 mm. in diameter with an overall anteroposterior length of 16 mm. The anterior outer surface is covered with tantalum mesh. Under the mesh is a groove which facilitates the passage of a suture needle through the mesh. The implant is fixed to Tenon's capsule and the conjunctiva after simple enucleation.

The integrated implant may be substituted for a ball implant after isolation of the 4 recti muscles. Each of the rectus muscles is sutured to the tantalum mesh as well as Tenon's capsule and the conjunctiva.

The new integrated ocular implant is also well adapted for use after eviscero-enucleation of the eye. To prevent extrusion of the implant by shrinkage of the sclera after eviscero-enucleation only the anterior half of the sclera is left in place (Fig. 2).

The cornea is excised and the globe eviscerated. The posterior half of the sclera is then removed along with a piece of the optic nerve, leaving a collar of sclera attached to the rectus muscles, episclera, and conjunctiva.

The implant may be securely attached to the remaining rim of the sclera allowing normal range and rapidity of motion of the prosthetic

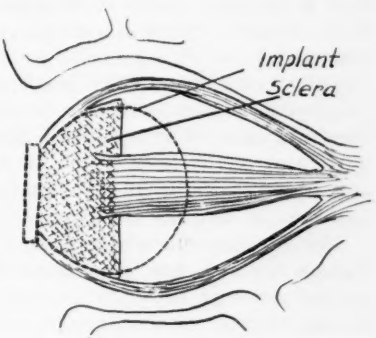


Fig. 2. Implant in place.

* A universal type integrated implant. Am. J. Ophth. 32:253-258, 1949.

eye. The oblique muscles are sacrificed in this procedure but the rectus muscles must be carefully held aside while the sclera is being divided.

The implant with sutures in place in the mesh is slipped into the orbit through the space behind the scleral collar. The sutures are then tied about 1.5 mm. from the anterior cut edge of the sclera.

If the sclera shrinks the implant cannot be extruded. Fixation is further assured by growth of tissue from the scleroconjunctival border into the tantalum mesh.

The eye may be fitted about three weeks after the operation. About 65° to 70° of horizontal and 65° of vertical movement are attained. The integrated implant has been successfully employed in 26 cases of evisceroenucleation.

Nonmagnetic Foreign Bodies in the Eye

JAMES S. SHIPMAN, M.D.*
University of Pennsylvania, Philadelphia

REMOVAL of a foreign particle from the eye should always be attempted unless too much ocular destruction would result. Imbedded pieces of copper are particularly dangerous because of the likelihood of irritative and degenerative changes including chalcosis lentis.

When ophthalmoscopic visualization is possible, James S. Shipman, M.D., finds that removal with forceps through a posterior sclerotomy is usually the best method. This measure, employing a forceps similar to the Hess iris instrument with flat corrugated tips, was used in 6 cases of intraocular copper, 5 in the vitreous, and 1 in the anterior chamber.

The nonmagnetic property of the foreign body is first established by noting response to application of a Parker electric hand magnet to the globe.

Anesthesia is accomplished with a retrobulbar injection of 1.5 cc. of 2% novocain. A small amount is also injected subconjunctivally into the quadrant to be explored.

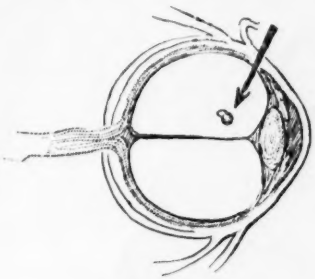
An incision is made in the bulbar conjunctiva parallel to, and 10 mm. back of the limbus. The sclera nearest the foreign body is exposed and cleaned of episcleral tissue. The operative area is then surrounded by diathermy micropins. Sclera and uvea are cut with a Graefe knife radially from the limbus. The incision is linear and as long as the size of the particle.

If the object is not visible, the field is observed through the dilated pupil with an ophthalmoscope while the forceps are manipulated in the vitreous chamber. The piece is grasped and withdrawn through the scleral opening.

The scleral incision is superficially

* Removal of intraocular nonmagnetic foreign bodies. Am. J. Ophth. 32:825-834, 1949.

coagulated with the Lacarrere electrode to prevent retinal detachment. The opening is closed with interrupted fine black silk 6-0 sutures. Just before closing the conjuntiva with running black silk sutures, the edges of the scleral incision are touched with either 50% trichloracetic acid or 50% phenol.



The use of the biplane fluoroscope may be advisable when hemorrhage clouds the vitreous. The scleral incision should be 6 to 8 mm. in length. The forceps are inserted at an angle and turned so that their action corresponds to the long axis of the incision. Manipulation is observed with the fluoroscope.

The use of an ophthalmic endoscope requires a large incision and entails considerable loss of vitreous. In some cases, however, the procedure may be necessary even though satisfactory vision is not preserved in the eye.

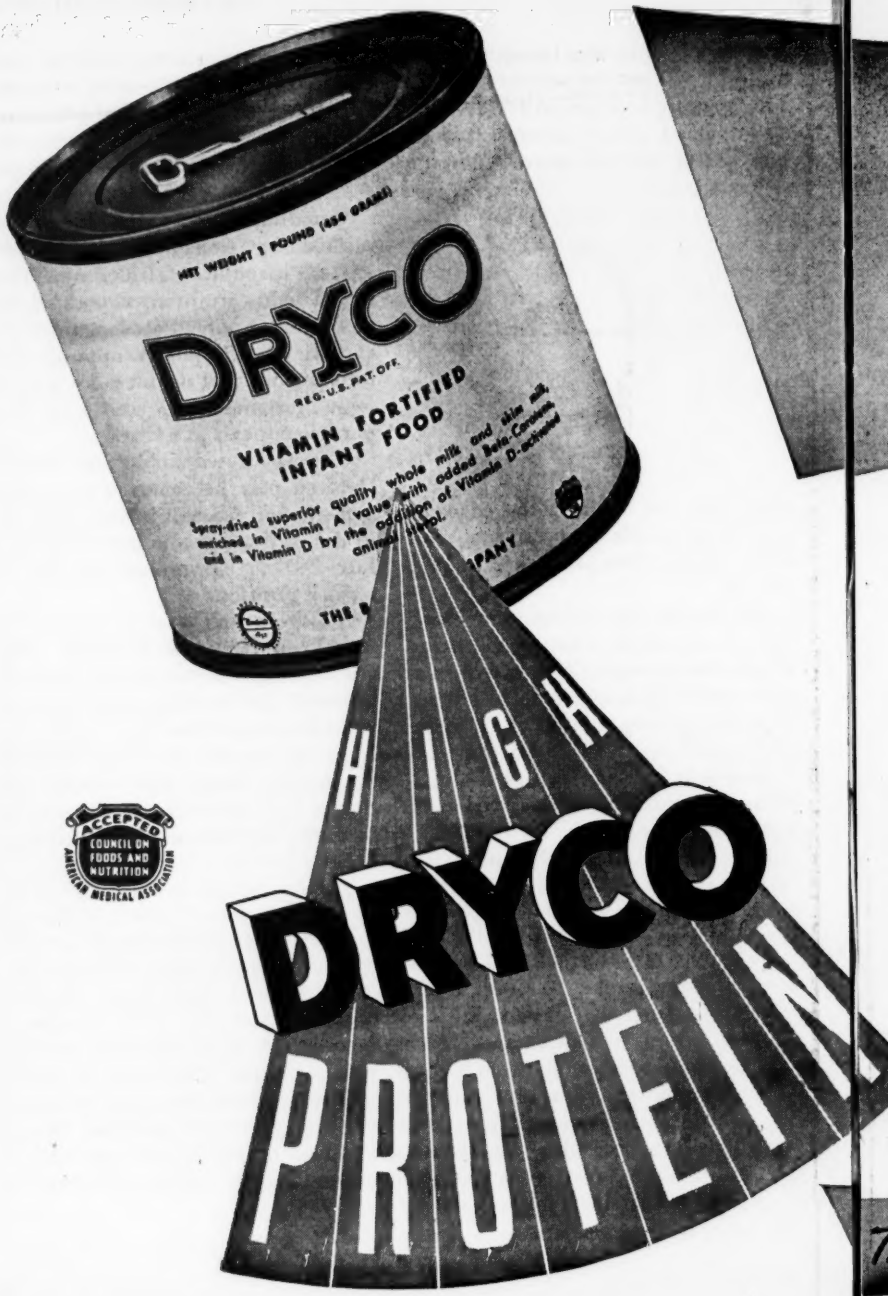
Visualization may also be accomplished by transillumination. The sclera is bared over a wider area. Two strong lights are inserted back of the globe and firmly placed against the eyeball at two points opposite the foreign body and the incision. A third light illumines the wound area. The particle appears as a shadow.

Objects located in the soft lens of children may be removed by needle and suction. A small incision is made in the cornea just anterior to the limbus and at approximately the 12 o'clock position.

A large needle such as is used for spinal puncture, with rubber tube and syringe attached, is inserted through the opening and into the soft cataractous lens. The needle, with open tip upward, is placed beneath the foreign body. Just enough suction is applied to engage the particle in the tip and the needle is then withdrawn.

ELECTROLYTE COMPOSITION OF SWEAT is affected by desoxycorticosterone and may be used as an index of adrenal cortical function. Jerome W. Conn, M.D., of the University of Michigan, Ann Arbor, finds that patients with untreated Addison's disease have concentrations of sodium and chloride in sweat far in excess of the normal range of 15 to 60 milliequivalents per liter. Electrolyte levels fall upon administration of desoxycorticosterone but rise again when treatment is stopped. Values between the upper normal limit and the high levels of Addison's disease are typical of panhypopituitarism. With adrenal cortical carcinoma, concentrations of sodium and chloride are extremely low.

Arch. Int. Med. 83:416-428, 1949.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References: 1. Dodd, K. and Minot, A. S.: *J. Pediat.*, 8:442, 1936.
2. Dodd, K. and Minot, A. S.: *J. Pediat.*, 8:452, 1936.
3. Sahyun, M.: *Am. J. Dig. Dis.*, 13:59, 1946.

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Tumors of the Parotid Gland

ROBERT W. BUXTON, M.D., JAMES H. MAXWELL, M.D., AND DONALD R. COOPER, M.D.*
University of Michigan, Ann Arbor

BENIGN and malignant parotid tumors cannot always be differentiated. Every primary growth should therefore be removed on discovery, unless already metastatic to distant parts of the body.

Far advanced malignant neoplasm may produce metastatic foci in cervical nodes. If more distant regions are not involved, radical removal of deep nodes is fully warranted.

With wide exposure, all pathologic tissue can be excised in most cases. Robert W. Buxton, M.D., James H. Maxwell, M.D., and Donald R. Cooper, M.D., protect the facial nerve by painstaking identification and meticulous dissection (see illustration).

If operation is contraindicated, or if the total removal of an ill-defined growth is in doubt, roentgen therapy should be applied in maximum dosage.

Operation was done on 227 benign or malignant parotid neoplasms, including mixed forms, pure carcinoma or sarcoma, and papilliferous cystadenoma lymphomatosum. Tumors had existed from one month to more than twenty years. Facial paralysis occurred in nearly one-fourth of the cases and in about 15% was permanent. Of persons with malignant tissue excised over five years ago, slightly more than two-thirds lived at least five years without recurrence.

For adequate exposure of the operative field, incision usually begins just below the level of the zygomatic process, immediately in front of the tragus. The opening is extended 1 or 2 cm. under the ear lobule, then forward along the posterior belly of the digastric muscle, and the flap reflected forward.

Healthy tissue ordinarily must be incised to reach the tumor capsule. To detect facial nerve branches, the electrode of a faradic excitor is passed over the gland. Tissue is safely entered if 2 or 3 volts produces no contraction of facial muscles.

When possible the entire capsule is removed intact with the tumor. Should the membrane rupture and tumor contents spill, the wound must be cleansed by prolonged irrigation.

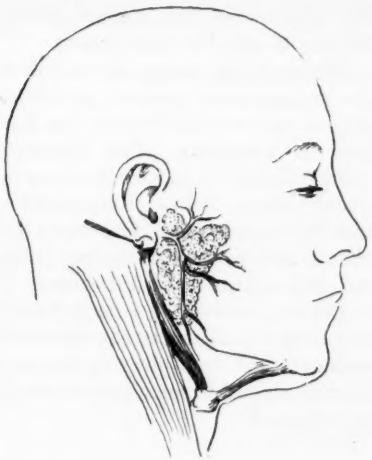
As the tumor may overlie and adhere to nerve branches, the mesial portion is freed with care not to divide a nerve segment.

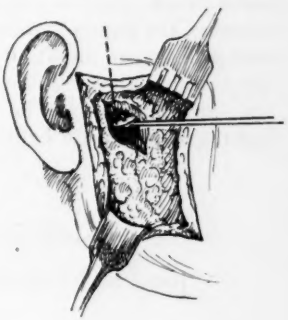
A tumor lying mesial to or beneath the facial nerve requires anatomic dissection of all neural branches, a procedure which makes removal of the tumor or even of all the gland seem incidental.

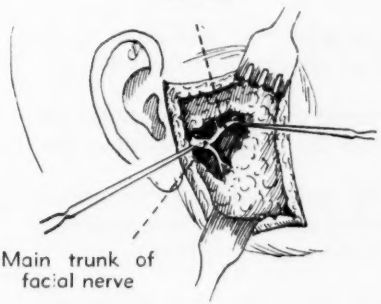
If a tumor is very large, excision may be facilitated by first opening the capsule and removing part of the contents. The entire capsule is thus secured.

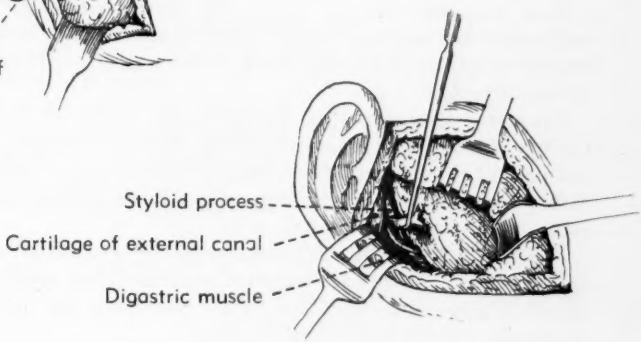
* Tumors of the parotid gland. Laryngoscope 59:565-594, 1949.

IDENTIFICATION OF FACIAL NERVE AT OPERATION









The course of the facial nerve is often distorted by tumor growth. The main trunk and branches may be exposed by separating the fascial sheath of the parotid gland from the perichondrium of the external auditory canal. Dissection is carried past the tympanic plate to the base of the styloid process.

Just lateral to the base, the facial nerve trunk may be recognized. If, however, the region between the mastoid process and mandibular angle is filled with tumor, the lower pole of the parotid gland may be lifted from the digastric muscle belly. As dissection approaches the styloid process, the nerve will be encountered.

When a large tumor encroaches on the stylomastoid foramen, identification of the nerve as it leaves the foramen is hazardous. The zygomatic branch should be located beneath the gland surface, below and parallel to the zygomatic arch. The branch is then traced back until the pes anserinus and main trunk are exposed.

During removal of a large parotid tumor the facial nerve should not be overstretched. In preference the nerve is severed, and nerve segments are approximated.

Costoclavicular Compression

JOHN M. MCGOWAN, M.D., AND MORRIS VELINSKY, M.D.*

BECAUSE of poor posture or skeletal defect, the subclavian artery and brachial plexus may be pinched between the clavicle and first rib.

Viselike action of the bones may result from depressed collarbone with low shoulder, or from elevated rib due to respiratory effort during emphysema or vigorous exercise.

Arm symptoms include lancinating pain, paresthesia, anesthesia, and weakness. Carrying a heavy load may cause pallor and numbness. Symptoms are often misdiagnosed as the scalenus anticus or cervical rib syndrome.

To prove diagnosis, John M. McGowan, M.D., of Tufts Medical College, Boston, and Morris Velinsky, M.D., of Kilgore, Tex., have the patient draw his shoulders back in the posture of military attention. If the pulse to the arm is greatly reduced or shut off, costoclavicular compression is indicated.

The test is done with subject standing and a blood pressure cuff on the upper arm. Values are recorded with shoulders held forward and up, then down and back. Results are positive if the second value is 20 points or more lower than the first.

Exercises aimed at strengthening the trapezius and levator scapulae muscles may benefit some patients.

* Costoclavicular compression. Arch. Surg. 59:62-73. 1949.

Non-Union of the Medial Malleolus

SAM W. BANKS, M.D.*
Northwestern University, Chicago

DISABLING symptoms may result if a fractured medial malleolus fails to reunite to the tibia. In some cases surgical repair is unnecessary because fibrous union of the malleolar fragment with the tibia allows normal use of the ankle without discomfort.

Pain and swelling over the malleolus, instability of the ankle, or the development of a posterior tibial tenosynovitis are indications for operative repair of the defect.

Figure 1

Sam W. Banks, M.D., recommends bone grafting utilizing a metal screw and cancellous bone instead of the conventional full-thickness peg or inlay bone graft.

The disjoined medial malleolus and adjacent tibia are exposed subperiosteally, and intervening fibrous tissue is removed. The fractured surfaces are shaved to expose cancellous bone and to make a wedge-shaped defect concave on the tibial aspect (Fig. 1).

A metal screw 1¾ in. long is then inserted through the malleolus from the tip upward into the shaft of the tibia (Fig. 2).

A plug of cortex 1½ in. square is removed from the tibia. Cancellous bone scraped from the tibia is packed into the crevice (Figure 3). The bone must not be forced into the articular cavity of the ankle or arthritis will result.

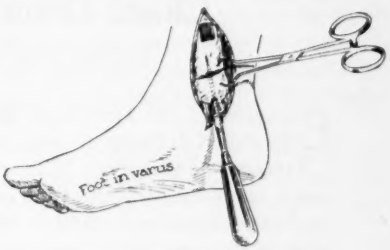


Figure 2

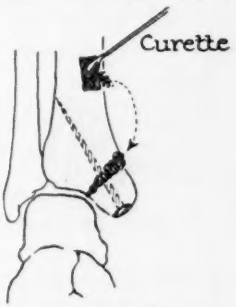


Figure 3

The tibial plug is replaced and the wound closed. A toe-to-knee cast is

* The treatment of non-union of fractures of the medial malleolus. J. Bone & Joint Surg. 31:658-662, 1949.

applied with the foot in varus position to relax the deltoid ligament.

Sutures are removed after fourteen days, at which time the original cast is replaced by one with walking iron incorporated. After about two weeks with crutches, full weight-bearing is allowed.

If roentgenograms made eight to ten weeks after the operation show consolidation of the fracture, the cast may be eliminated. Final recovery is assisted by physical therapy.

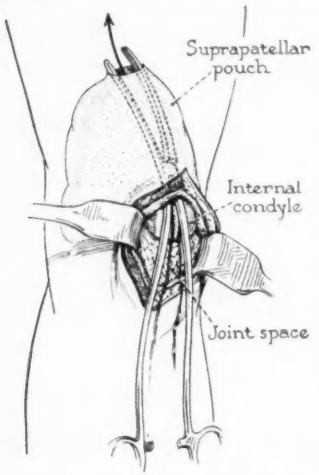
A full-thickness bone inlay is too small and a bone peg too weak for repair of malunited medial malleolus, but a metal screw affords strong internal fixation and the cancellous bone pack stimulates healing and fragments rapidly consolidate.

Closed Drainage of the Knee

FREMONT A. CHANDLER, M.D.*

EFFUSION of the knee joint after arthrotomy is almost eliminated by closed drainage to deep muscle planes of the thigh.

Fremont A. Chandler, M.D., of the University of Illinois, Chicago, opens the joint capsule with a blunt forceps. A medium-sized uterine packing forceps with double curve can be introduced through any type of incision and is long enough to reach well beyond the joint cavity.



With closed blades, the tip is inserted to the apex of the suprapatellar pouch and pushed through the synovial membrane and capsular folds. The orifice is widened by opening the blades.

The joint fluid escapes into an extensive intermuscular plan and is absorbed by the lymphatic system rather than by capillaries. Drainage is continuous. Early joint movement, active and passive, produces a milking effect and prevents sealing of the tract; fluid does not pool along suture lines or greatly increase intra-articular pressure.

Postoperative pain is materially reduced. Voluntary use of the knee extensors is facilitated and quadriceps atrophy decreased to a minimum.

* Closed drainage of the knee joint following arthrotomy. J. Bone & Joint Surg. 31-A:580-581, 1949.

Aspiration with Elbow Fractures

T. B. QUIGLEY, M.D.*
Harvard University, Boston

EARLY active motion is desirable in the management of fractures of the elbow, especially when the radial head is involved.

Prompt arthrotomy is required for injuries to the elbow joint causing severe comminution and displacement of the head of the radius. However, fractures with only slight impaction and displacement may be treated conservatively, employing active motion.

Pain and limitation of movement after fracture of the radial head often prevent the prescribed exercises. Therefore, T. B. Quigley, M.D., suggests aspiration of the bloody fluid usually present under considerable pressure in the joint space. Aspiration is not performed until at least twenty-four hours after the injury, lest hemarthrosis recur.

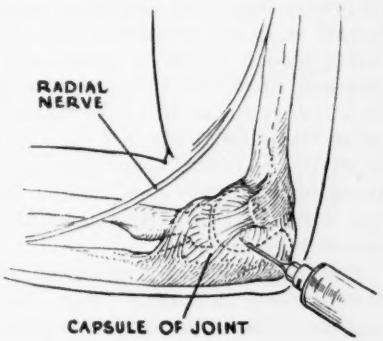
In most cases pain will be relieved and the range of motion of the elbow will be increased sufficiently to allow adequate movement.

The procedure is simple but should be done where aseptic technic is possible. Joints resist infection poorly and antibiotics cannot substitute for a clean operating room, meticulous skin disinfection, and rubber gloves.

The forearm is pronated to reduce the hazard of striking the radial nerve. After thorough procaine infiltration of overlying tissues, a 16-gauge needle is inserted into the lateral aspect of the elbow joint (see figure). The point pierces the skin in the center of an anatomic triangle formed by the radial head, the tip of the olecranon process of the ulna, and the lateral epicondyle of the humerus. Often 10 cc. or more of bloody fluid is obtained.

The procedure is helpful in deciding whether arthrotomy is necessary for fractures with a questionable degree of displacement of the radial head.

When motion of the elbow is still limited or passive rotation of the joint causes a palpable grating after removal of fluid, the radial head should be excised. Decision can almost invariably be made of the time of aspiration.



Aspiration is not a substitute for arthrotomy when circumstances indicate excision of the radial head.

* Aspiration of the elbow joint in the treatment of fractures of the head of the radius. New England J. Med. 240:915-916, 1949.

Continuous Peridural Analgesia for Obstetrics

CHARLES E. FLOWERS, JR., M.D., LOUIS M. HELLMAN, M.D., AND ROBERT A. HINGSON, M.D.*

Johns Hopkins University, Baltimore

THE sixteen nerves that transmit the pain of parturition may be blocked by a local anesthetic agent injected between lumbar vertebral spines into the extradural space.

The spinal cord is not affected, and the dose is only one-third the amount needed in caudal analgesia. The method of Charles E. Flowers, Jr., M.D., Louis M. Hellman, M.D., and Robert A. Hingson, M.D., may be employed for any active labor, full term or premature.

Special indications are low physical reserve, conditions interfering with caudal or spinal anesthesia, and cesarean section. Peridural analgesia is safe and effective with grade 3 or 4 heart disease, severe tuberculosis, acute respiratory infection, metabolic disorders, caudal deformity, ruptured intervertebral disk, syphilis of the central nervous system, or after recent poliomyelitis.

Conduction blockade is started in the last five or six hours of labor. Contractions must be strong and regular, with no prospect of obstruction or severe bleeding. The back is prepared as for spinal anesthesia. If spinal interspaces are small, the patient is seated, otherwise she is placed on the left side with legs partly flexed.

At the second lumbar interspace the skin, interspinous ligament, and ligamentum flavum are infiltrated with the anesthetic agent to be used throughout.

Agents include 1% xylocaine, 1.5% metycaine, 0.15% pontocaine, 2% procaine, and 2% intracaine. A blunt 16-gauge Tuohy spinal needle with sharp stilet for piercing skin, subcutaneous tissue, and interspinous ligament is inserted in the exact center of the interspace.

As the needle is slowly advanced into the ligamentum flavum, air is repeatedly injected with a small syringe. The plunger rebounds until the peridural space is reached, then falls into place. A plastic tube attached to caudal analgesia apparatus is introduced.

A correctly placed catheter readily passes up or down the peridural space. To determine entry of the subarachnoid area, two doses of the anesthetic are injected five minutes apart. If no spinal effects are noted the subarachnoid space has not been entered and full analgesia may be begun. For the first thirty minutes anesthesia is not complete and the patient should be encouraged to sit in a chair or walk with support.

During early labor the tube should be inserted to the twelfth thoracic space. The maintenance dose, 5 to 7 cc. of the anesthetic, is injected slow-

* Continuous peridural anesthesia and analgesia for labor, delivery and cesarean section. Current Researches in Anesth. & Analg. 28:181-188, 1949.

ly, to affect only the eleventh and twelfth thoracic nerves and the first lumbar nerve. Often the test doses alone completely relieve pain of early uterine contractions.

The catheter is sent caudad in the late stage of labor and when rapid labor is expected. As the fetus begins to distend the vagina, the sacral plexus must be blocked. With the patient temporarily in sitting position, 8 to 12 cc. is given every fifteen or twenty minutes until the perineum is numb. If preferred, a second catheter may be inserted for injection into the caudal canal.

About thirty to forty-five minutes before natural or forceps delivery, 10 to 15 cc. is injected two or three times at ten-minute intervals.

Dosage for cesarean section is the same as for labor, and the catheter is inserted to the twelfth thoracic or first lumbar interspace. At least three injections are made, starting twenty minutes before operation. The anesthetic level should include the tenth thoracic dermatome to relieve pain about the bladder. When pelvic adhesions exist, the sixth thoracic dermatome is anesthetized to eliminate peritoneal traction pain.

Aureomycin for Staphylococcal Infection

CAROLINE A. CHANDLER, M.D., EMANUEL B. SCHOENBACH, M.D., AND MORTON S. BRYER, M.D.*

AFTER failure of other drugs, aureomycin may save babies critically infected with hemolytic *Staphylococcus aureus.*

Manifestations include breast abscess, cellulitis, pneumonia, multiple lung abscess, septicemia with peritonitis, and abscess of the liver. Newborn and older infants treated by Caroline A. Chandler, M.D., Emanuel B. Schoenbach, M.D., and Morton S. Bryer, M.D of Johns Hopkins University, Baltimore, had previously been given sulfonamides, penicillin, and streptomycin, alone or combined, for as long as two months.

Before use, 20 mg. of aureomycin hydrochloride is dissolved in 0.5 oz. of 10% sucrose solution. From 30 to 60 mg. per kilogram of body weight may be given daily by mouth. If additional antibiotic is necessary, intramuscular supplements of 20 mg. daily may be administered.

Treatment continues about ten days. Symptoms usually improve within forty-eight hours. Abscesses rarely require surgical drainage, and cultures become sterile in two to five days.

Except for occasional vomiting or transient diarrhea, toxic reactions have not been noted.

* Observations on staphylococcal infestions treated with aureomycin. J. Pediat. 34:149-156, 1949.

STREPTOCOCCIC RESPIRATORY INFECTION during rheumatic fever may be prevented by oral doses of penicillin before meals. At LaRabida Jackson Park Sanitarium, Chicago, 200,000 units of the antibiotic per day eliminated hemolytic Group A organisms from accessible parts of mouth and throat, though deep recesses were not examined. Jesse W. Hofer, M.D., believes that penicillin has greater antistreptococcic capacities than the sulfonamides have. By oral penicillin, 63 children were protected for seven months, while several patients not given the antibiotic had upper respiratory disease and carrier states. No toxic reactions developed from the penicillin, and drug resistance of isolated bacteria did not increase.

J. Pediat. 35:135 144, 1949.

LUNG INVOLVEMENT WITH PANCREATIC FIBROSIS is reduced in incidence by aureomycin. From 20 to 30 mg. of powdered aureomycin per kilogram of body weight is given in capsules with food or drink. Infants receive 125 to 250 mg. daily in 1 or more doses, older children up to 750 mg. in two or three doses. Harry Shwachman, M.D., and associates of Harvard University, Boston, announce good to excellent results in 31 of 35 cases. Cough disappears, appetite, weight, and well-being improve, and the stools become normal. When the drug is withdrawn symptoms return.

New England J. Med. 241:185-192, 1949.

INTRAMUSCULAR STREPTOMYCIN DOSAGE for children of all ages can be adjusted to produce a predictable serum level. For a level constantly above 5 micrograms per cubic centimeter, Andrew D. Hunt, Jr., M.D., and Mary B. Fell of the Children's Hospital of Philadelphia recommend injection of 11 mg. of streptomycin per kilogram of body weight every six hours. Streptomycin hydrochloride or sulfate is used in dilutions of 50 and 100 mg. to 1 cc. of distilled water.

J. Pediat. 34:163-169, 1949.

CONGENITAL SYPHILIS may almost always be cured by penicillin if treatment starts before the third month of life. The fall in serologic titer is less prompt and persistent in older infants. Early treatment is more important than amount or form of the drug or method of administration. Elizabeth Kirk Rose, M.D., Paul György, M.D., and Norman R. Ingraham, Jr., M.D., of the University of Pennsylvania, Philadelphia, obtained apparent cures in 52 of 53 cases by a total dose of 20,000 to 200,000 units of an aqueous preparation per pound of body weight. This amount was given intravenously for fifteen days on a three-hour schedule.

Am. J. Dis. Child. 77:729-735, 1949.

Advice for Parents of Young Stutterers

SPENCER F. BROWN, M.D.*
State University of Iowa, Iowa City

STUTTERING at an early age often disappears before the condition is noticed by the child, if the family is not demonstrably concerned.

Practically all preschool children repeat sounds, syllables, or even whole sentences at the approximate rate of once in 22 words.

The speech defect usually becomes established when parents are alarmed by natural fumbling for sounds and repetition of words and stop the child's talk.

The youngster will make an attempt to improve and fails, tries harder, stumbles more frequently, and is completely confused.

The first step in speech correction, declares Spencer F. Brown, M.D., is a detailed inquiry, when the child is not present, into the parents' attitude toward the trouble.

The first day stuttering was noticed and corrective measures that have been already attempted should be ascertained.

Family theories of the cause are invited. If nervousness is mentioned, the reasons for tension and insecurity should be sought.

The methods of toilet training and other discipline are carefully investigated. The child is thoroughly examined, chiefly to satisfy the parents that the basis of the stuttering is not organic.

The child's speech is then analyzed with the father and mother present. Parental reaction to a lapse and the child's response to that reaction are observed. Speech is also studied informally, with the child alone and allowed to speak spontaneously.

Other vocal disorders such as tonic block, prolonged sound, and overuse of *uh* or *ah* are noted. Undue effort during repetition, grimaces, and other manifestations of tension not involving the speech mechanism are evidence of an established habit.

The parents are then recalled for instruction in the theory of stuttering. Ordinary faults of speech of children and adults are discussed and the harmful results of lay diagnosis of stuttering are stressed.

The parents should not be blamed for the speech defect, but necessary changes in home environment are suggested.

Parents are warned not to criticize hesitant speech and, more important, are urged to accept repetition as essentially natural.

For their own reassurance, both the parents may be asked to count repetitions that occur in the talk of neighborhood children. Several conferences are held at intervals of two or three weeks, then a few spaced three to six months apart.

To avoid the impression of a serious malady, drugs are not prescribed. If the parents cooperate, the child's

* Advising parents of early stutterers. J. Pediat. 34:170-176, 1949.

speech problem usually disappears in a short time.

Confirmed stuttering with anxiety and severe muscular tension usually requires special treatment. If no qualified speech teacher is known, information may be obtained from the Secretary-Treasurer of the American Speech and Hearing Association, Wayne University, Detroit.

Senescence in Man: A Study of Elderly Twins

FRANZ J. KALLMANN, M.D., AND GERHARD SANDER, Ph.D.*

BY 1980 probably one-half of the people in this country will be over forty-five years of age. The progressive lengthening of man's life span is accentuating the social, economic, and psychiatric problems encountered with advancing years. To cope with old age, a sound understanding of the factors controlling progression from maturity to senility is desirable.

Franz J. Kallmann, M.D., and Gerhard Sander, Ph.D., of Columbia University, New York City, are convinced that heredity and constitution are of fundamental importance in determining at what age and in what manner a person becomes senescent.

A study of 1,602 elderly twins reveals differences between individuals from one egg (monozygotic) and those from two (dizygotic). One-egg partners have genetically determined likenesses in physique and personality that persist through life and age at about the same time and in the same fashion.

Graying of hair, baldness, wrinkles, and dental, visual, and auditory difficulties commonly affect both or neither of the twins from one egg. In some cases the similarity applies even to roentgen and electrocardiographic features. This resemblance holds true despite extreme differences of occupation, marital status, and environment.

Intellectual deterioration begins at nearly the same age and progresses in a like manner for both offspring of a single ovum. One-egg twins usually have a comparable life span and may die of the same cause within a few days of one another.

Dizygotic partners seldom have identical physical or mental attributes. Aging manifestations are not similar and the length of life differs between partners.

Dizygotic twins are more apt to marry and have children than are the members of a one-egg pair, especially male monozygotic twins. The difference is probably psychologic rather than biologic since the wives of one-egg twins often have difficulty in overcoming the close relationship that exists between their husbands.

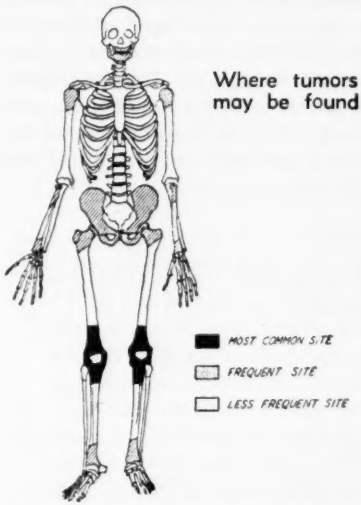
* Twin studies on senescence. Am. J. Psychiat. 106:29-36, 1949.

Giant Cell Tumor of Bone

T. M. PROSSOR, M.D.*
Westminster Hospital, London

IRRADIATION provides effective therapy for osteoclastoma and is the preferred treatment in many cases.

Excision may be advisable for tumors of the clavicle, ribs, lower end of the ulna, patella, or head of the fibula. To restore lost function, reconstructive surgery is sometimes necessary. Radical operation most rapidly and certainly eradicates giant cell tumor but it is often difficult because of proximity to joints.



Commonly benign but occasionally malignant, giant cell tumor of bone appears most frequently between ages of twenty-five and thirty years, usually in long bones at or near the epiphyses, especially about the knees (see illustration).

A tumor may be first discovered at the site of a pathologic fracture in a search for the cause of continuous pain after a trivial injury. Within a few months globular swelling can be felt, sharply demarked from the uninvolved portion of the shaft. A bruit may be heard, or a thrill or egg-shell crackling may be felt over the growth.

A radiogram usually shows a solitary destructive lesion at the center or one side of the bone. A thin, generally continuous cortical shell borders an expanded multilocular cystic area, with bone trabeculae projecting into translucent space.

Simple bone cysts may be similar but occur in the metaphysis at younger ages and gradually become displaced down the shaft. Osteolytic osteogenic sarcoma, metastatic carcinoma, single chondroma, and osteitis fibrosa must be differentiated. Doubtful diagnoses may be resolved by punch biopsy, which is simple and safe.

Effects of high voltage roentgen rays and gamma rays from teleradium are equally satisfactory. Roentgen rays are generated at 200 kilovolts, 20 milliamperes, filtered by 1.5 milliliter of copper and 1 milliliter of aluminum and delivered from a focal skin distance of 50 cm. through 2 opposing ports. In the first course a skin dose of 200 r

* Treatment of giant-cell tumours of bone. J. Bone & Joint Surg. 31-B:241-251, 1949.

and a tumor dose of 90 r should be given daily at the rate of 34 r per minute.

The duration of treatment is about four weeks. A total dose of 2,000 r is recommended for adults and 1,200 for children. If necessary, a second course may be given after lapse of six months and a third after eighteen.

Teleradium therapy is administered with a 4-gm. unit and skin ports of 63 to 64 sq. cm. Using each port on alternate days, a daily treatment of fifty minutes is continued for twenty days. The lesion receives 245 r every forty-eight hours for a total 2,450 r.

Irradiation destroys the tumor and progressively lessens pain. New bone is laid down, and within eighteen months cystic areas may be filled. Hemorrhage, necrosis, sepsis, and recurrence are rare.

If rays are delivered too rapidly or in excessive amounts the tumor grows, the shell of bone becomes thin, and overlying skin appears red, hot, edematous, and tender. To avoid accelerated growth of the lesion or malignant change, dosage must be regulated with care.

In many cases the tumor may be removed by curettage and the cavity filled with bone chips. Results may be excellent but recurrence incidence as high as 20% may be expected.

Irradiation was employed by T. M. Prossor, M.D., in 25 cases, in several instances after curettage had been ineffective. Results were good in 20 cases observed for periods of a few months to ten years. With 3 tumors pain continued or recalcification was incomplete; 1 was fatal and 1 required amputation.

CYSTIC ACNE VULGARIS usually disappears after a treatment or two with solid carbon dioxide in a block or shaped as a pencil. Deep involvement, however, may require several applications. Results in more than 2,000 severe cases were so good that Carroll S. Wright, M.D., and E. R. Gross, M.D., of Temple University, Philadelphia, have abandoned surgical drainage. The solid carbon dioxide is applied with moderate pressure for three to five seconds. A single pustule or several lesions may be covered at one time. Surface vesiculation often appears within a few hours, but eruption usually heals with little or no scarring.

Arch. Dermat. & Syph. 59:664-665, 1949.

INHALANT ALLERGENS such as house dust, ragweed, and wool particles absorbed through the nasal mucosa may cause atopic dermatitis as well as asthma. Louis Tuft, M.D., of Temple University, Philadelphia, noted special sensitivity in older children and adults. Animal or human dander, silk, and cooking odors are less common factors but perhaps important. Infrequent irritants are orris root, tobacco, insecticides, and cereal flours.

J. Invest. Dermat. 12:211-219, 1949.

Diagnostix

Here are diagnostic challenges presented as they confront the consultant from the first clue to the pathologic report. Diagnosis from the Clue requires unusual acumen and luck; from Part II, perspicacity; from Part III, discernment.

Case MM-152

THE CLUE

ATTENDING M.D: Sorry to keep you waiting. I was in the admitting room examining a thirty-year-old man who suddenly had severe abdominal pain just before lunch today. He was brought here by ambulance. Will you please see him immediately?

VISITING M.D: Yes. What was the patient doing before he became ill?

ATTENDING M.D: It is difficult to question him because of his pain. However, his wife, who is with him, told me that he had been emptying boxes of trash which had collected in their garage.

PART II

ATTENDING M.D: *(Entering the admitting room)* Here is the patient. His temperature and blood pressure are normal but the pulse is only 56. I have requested a serum amylase. The total leukocyte count and percentages are normal. The patient has been unable to void.

VISITING M.D: *(Examining the patient, who is writhing with pain, moaning, and perspiring profusely)* The abdomen is board-like, but I can find no areas of tenderness. The muscles of the arms and legs are tense and all deep tendon reflexes are hyperactive. I cannot make a satisfactory rectal examination because of the tightly contracted anal sphincter and gluteal muscles. Do you have any roentgenograms?

PART III

ATTENDING M.D: Yes, but they are of no help. A chest film and flat and upright films of the abdomen are negative. However, the surgeon, Dr. Smith, still feels that a laparotomy should be done. The laboratory has just called. The serum amylase is 100 units.

VISITING M.D: With that, acute pancreatitis is a poor possibility. Dr. Smith probably suspects a perforated pep-

tic ulcer but, with no gas under the diaphragm, no abdominal tenderness despite extreme rigidity of the abdominal wall, and no knowledge of an ulcer in the past, I should question that diagnosis. The generalized increase of muscle tone suggests a different condition to me. And here is what I've been looking for *(points to a small reddened area of skin behind the left knee).* Give the patient 10 cc. of a 10% solution of calcium gluconate intravenously and see what happens.

PART IV

ATTENDING M.D: *(Later)* It is remarkable. The patient's pain and muscle spasm disappeared even before all the calcium gluconate had been injected. I'm afraid I would never have thought of arachnidism. What first suggested the diagnosis to you?

VISITING M.D: The fact that he had been cleaning out his garage before becoming ill. Black widow spiders are more common than we suppose, especially in urban areas. They are found in all parts of the United States and prefer to live in dark corners of garages, basements, and similar places. They will bite if disturbed. When a patient recalls a spider bite shortly before becoming ill, diagnosis of arachnidism is easy. However, when toxin has spread through the general circulation an acute condition results, resembling perforated ulcer.

ATTENDING M.D: The patient is feeling better now and remembers having a sharp pain behind his knee while working in the garage. He thought a wasp had stung him. Will he need other treatment?

VISITING M.D: Yes, probably two or three more 10-cc. injections of 10% calcium gluconate will be needed to prevent return of pain and muscle spasm. The spider toxin stimulates the myoneural junctions and calcium depresses this action.

" I understand she's a model."

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EATON LABORATORIES, INC., NORWICH, N. Y.

Downing, J. et al.: J. A. M. A. 133:299, 1947 • Johnson, H.: Arch. Dermat. & Syph. 57:348, 1948 • Miller, J. et al.: New York State J. Med. 47:2316, 1947 • Miller, R. et al.: North Carolina M. J. 9:574, 1948 • Shipley, E. et al.: Surg., Gynec. & Obst. 84:366. 1947.

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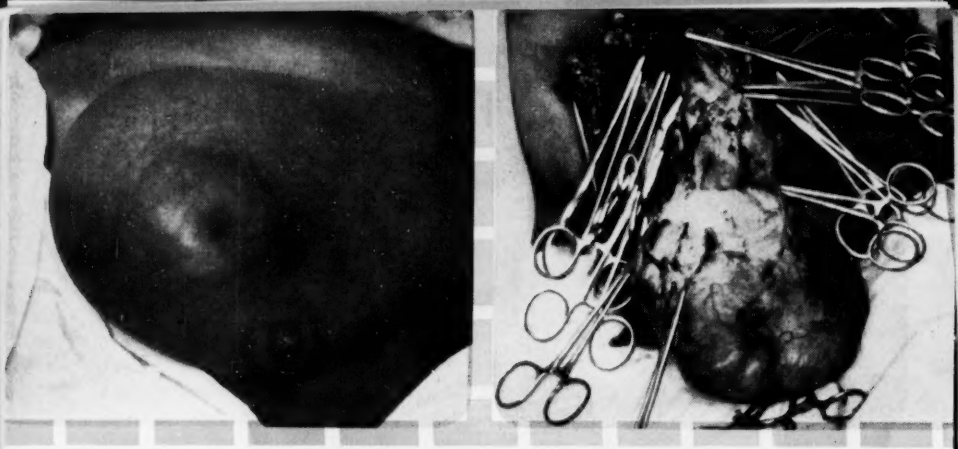

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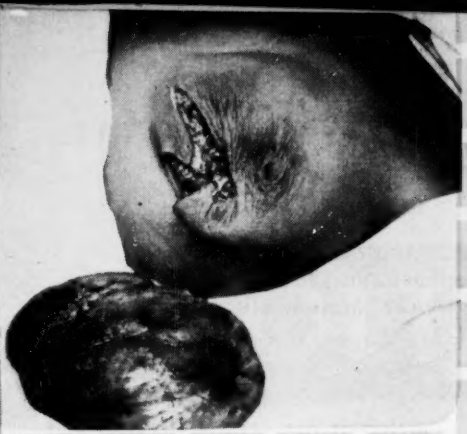
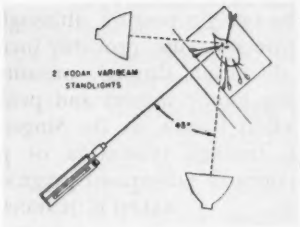
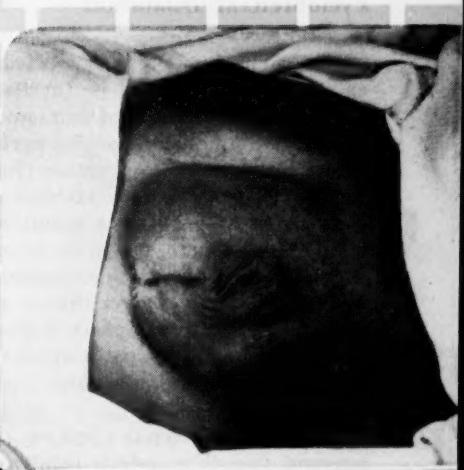
Serving medical progress through

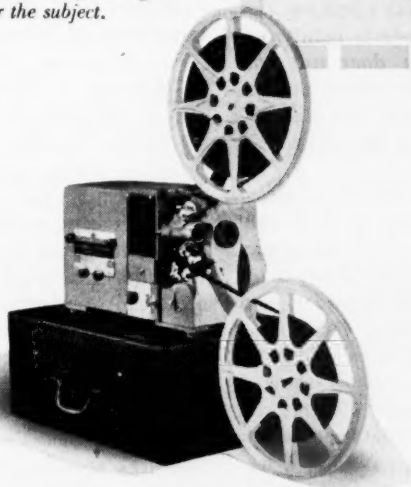


Four views depicting successive stages in the surgical resection of a tumor of the mammary gland.



In the making of surgical motion pictures, anatomic features stand out clearly when one of the lights is placed near the subject.





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Medical Forum

Discussion of articles published in MODERN MEDICINE *is always welcome. Address all communications to The Editors of* MODERN MEDICINE, *84 South 10th St., Minneapolis 3, Minn.*

Pyeloureteral Dilatation of Pregnancy*

TO THE EDITORS: Dr. G. van Wagenen and I are interested in Dr. Paul L. Singer's discussion of our work as to the hormonal theory of pyeloureteral dilatation of pregnancy (July 1, 1949, p. 73). We shall attempt to answer Dr. Singer's three questions.

1] *"Why? There seems to be no physiologic need for such dilatation."* We would simply answer that it appears to be a corollary effect of those forces (hormonal) which bring about stasis in the uterus, of which there is need in pregnancy.

2] *"If the hormonal effect on the ureteral smooth muscle is incidental and accidental, why does not the smooth muscle of the blood vessels, intestine, and bladder also dilate?"* This question is answered very well on the same page by Dr. A. M. McCausland's statement: "If in pregnancy there is present a relatively high level of progesterone, veins may dilate more than is physiologic; as well as the ureters, gallbladder, and the gastrointestinal tract."

3] *"Aside from primates and man, why do not other animals show a similar pyeloureteral dilatation?"* Our answer is that dilatation of the ureters is not peculiar to man and primates and has been studied also in rabbits by Crabtree, Abramson, and Robins *(Surg., Gynec. & Obst.* 71:60, 1940).

The upright posture, although not the primary cause, probably increases the dilatation through pressure on already atonic ureters and probably the effect lessens, as Dr. Singer suggests, through relaxation of pelvic structures in subsequent pregnancies.

RALPH H. JENKINS, M.D.
G. VAN WAGENEN, PH.D.
New Haven, Conn.

*MODERN MEDICINE, May 15, 1949, p. 63.

Procaine for Cardiac Disorders of Anesthesia*

TO THE EDITORS: I fully agree with Dr. Charles L. Burstein that intravenous procaine has been very helpful in the treatment of cardiac arrythmias during anesthesia in intrathoracic surgery.

In a recent study of 33 cases of cardiocirculatory disturbances during intrathoracic surgery *(Surgery,* 25:36-46, 1949) performed at the Bronx Veterans Hospital with electrocardiographic determinations during operations, various arrhythmias, such as nodal rhythm, AV heart block, prema-

(Continued on page 92)

*MODERN MEDICINE, July 15, 1949, p. 58.

"Results with Chlorophyll Therapy in 40 Cases of Dermatoses"

Excerpts from a clinical paper by W. D. Langley, M. D., and W. S. Morgan, M. D., published in The Pennsylvania Medical Journal, 51:44, 1947. This clinical investigation was conducted in the Guthrie Clinic and Robert Packer Hospital, Sayre, Pa.

The following synopsis provides physicians a convenient review of the clinical experience of Drs. Langley and Morgan with Chloresium and chlorophyll therapy in the treatment of acute and chronic dermatoses. It quotes their reasons for undertaking the investigation . . . describes the effects of the treatment . . . and summarizes the final results. This report is one of an extensive series of published papers on Chloresium chlorophyll therapy; reprints are available on request.

Why investigation was undertaken

"Following the recent experimental work on water-soluble chlorophyll proving it to be a tissue stimulant which resulted in the suggestion that this drug might be found of value in the treatment of osteomyelitis, burns, and chronic ulcers, it was thought worth while to employ this substance in a series of such cases in an attempt to corroborate clinically the experimental findings. It was while this series† was in progress that we first became aware of the value of water-soluble chlorophyll* in the treatment of dermatoses . . .

"Chlorophyll (Chloresium) was used more or less in desperation when other measures had failed to relieve the subjective symptoms and objective manifestations of several cases of dermatoses of varied type. We knew from our own previous experience and from the literature that chlorophyll was bland in its effect on the skin. We did not anticipate in any measure, however, the degree of beneficial effect produced by chlorophyll . . . in these problems.

Selection of cases

"During a period of six months, from February to July, 1946, we treated 40 dermatologic cases, the majority of which had proved highly resistant to all previous treatment.

Objective results

"The objective response seen over the involved areas proved to be no less dramatic than the palliation of symptoms. In many of the acute cases, areas which were highly erythematous, swollen, and weeping before application of water-soluble chlorophyll ointment were found to be greatly improved within ten to twelve hours. The absence of oozing after this period of time was most impressive.

"In no patient in this series of dermatologic problems treated with water-soluble chlorophyll has there been any evidence of toxicity or allergic reaction."

†The favorable findings from this study were presented (in a report "Treatment of Chronic Ulcers with Chlorophyll," in the Am. J. Surgery, April, 1948).

*The water-soluble chlorophyll ointment used in this study was supplied in generous amounts by Rystan Company, Inc., Mt. Vernon, N. Y. It is marketed under the trade name "Chloresium" (Solution [Plain], Ointment).

SUMMARY TABLE

Diagnosis	No. of Cases	Duration	Previous Treatment	Results from Water-Soluble Chlorophyll Ointment	Statistics and Healing Time
Contact dermatitis	8	Two weeks to eighteen months	Cold boric acid and starch wet dressings; calamine lotions	Relief of itching in all cases; progressive objective improvement; decreased weeping, erythema, edema in acute cases; in chronic type, there was softening of skin and loss of lichenification; removal of crusts	All cases clinically cured: 5 within 10 days, 2 within 2 weeks, 1 within 1 month
Stasis dermatitis	13	One to eighteen months	Cold boric acid and starch wet dressings; penicillin ointment and bland ointments	Relief of itching and burning in all cases; progressive objective improvements	12 cases clinically cured: 6 within 10 days, 5 within 3 weeks, 1 within 6 weeks. No objective improvement in 1 case
Neurodermatitis	5	Three to eighteen months	Cold boric acid and starch wet dressings; x-rays, ultraviolet radiations, and bland ointments	Relief of itching and burning in all cases; diminished erythema, weeping, edema, crusting	All cases showed sustained improvement; 3 cases clinically cured within 2 weeks; 2 cases showed much improvement
Seborrheic dermatitis	3	Two weeks to one year	Cold wet dressings; penicillin ointment (one case, no previous treatment)	Relief of itching; diminished erythema, edema, weeping, crusting	All cases clinically cured within 2 weeks; 1 case within 2 days
Exfoliative dermatitis	2	Twelve to eighteen months	Zinc oxide; penicillin ointment; cold wet dressings	Diminished erythema, edema, weeping, scaling, crusting	Both cases clinically cured: 1 case within 2 weeks
Infantile eczema	2	One to three months	Boric acid ointment and penicillin ointment	Relief of itching; diminished erythema, weeping, crusting	Both cases clinically cured: 1 case within 1 week
Syeosis vulgaris	3	Two weeks to eight years	Penicillin ointment; x-rays	Relief of itching; diminished erythema, weeping, crusting	2 cases improved; 1 showed no objective improvement
Pyogenic fungus	1	Six months	Local applications of unknown type	Good	Healed in 7 days
Nummular eczema	1	Six months	Local applications	Poor	None
Psoriasis	1	Twelve years	Numerous local applications	Good symptomatic relief	No effect on lesions in 30 days
Moniliasis of vulva	1	Three years	X-ray therapy; estrogens; antipruritic application	Relief of itching and burning; was dramatic in 48 hours	Almost complete healing in 2½ mos.

CONCLUSIONS

"Of 40 cases treated with water-soluble chlorophyll (Chloresium), all experienced relief of itching and burning. Thirty-six cases or 90 per cent showed decided improvement objectively. Four or 10 per cent were not improved.

"Of the 36 cases showing response to treatment with chlorophyll, 32 or 88.8 per cent have been completely relieved of the present attack. Four continue to improve.

"Of the 40 cases, 31 or 77.5 per cent had been active for one month or longer. Nine cases varied in duration from one to three weeks."

ture contractions, and ventricular tachycardias were abolished by the use of intravenous procaine.

I have not much to add to the statements of Dr. Burstein. I wish, however, to state that the material reported did not consist exclusively of cardiac patients; the operations were performed on a nonselected group of patients undergoing intrathoracic surgery.

LOUIS A. KAPP, M.D.

Bronx

Dihydrostreptomycin and Tuberculosis*

TO THE EDITORS: We now have many chemotherapeutic and antibiotic agents at our disposal, but streptomycin is the first compound to be found of value against the tubercle bacillus.

The only patients with miliary tuberculosis or tuberculous meningitis who have ever recovered have done so under the influence of streptomycin. Proof of this has been well established by numerous reports in the medical literature. The one great drawback to routine clinical use of streptomycin is, of course, its tendency to neurotoxicity.

Preliminary studies with dihydrostreptomycin, described by Drs. William H. Feldman and H. Corwin Hinshaw and associates, indicate that it is as effective against the tubercle bacillus as is streptomycin but has the advantage of being less toxic to the central nervous system. It seems therefore that, for the time being at least, dihydrostreptomycin will become the drug of choice.

It is doubtful, however, if this antibiotic is the final chemotherapeutic answer to tuberculosis and we look forward with interest and enthusiasm to the development of compounds which will be more active and less toxic than those now at our disposal.

H. A. CAVE, M.D.

Windsor, Ont.

Curare and Exercise for Poliomyelitis*

TO THE EDITORS: This is my opinion as to the rationale of the use of curare for treating patients in the acute stages of poliomyelitis, as described in a recent article by Drs. W. D. Paul and O. A. Couch, Jr. Curare has no antiviral activity in treatment of the acute stage of poliomyelitis. It causes paralysis of skeletal muscles by interrupting nervous impulses at the myoneural junction. The drug might be expected to reduce muscle spasm such as that associated with infection of the central nervous system by poliomyelitis virus.

Unfortunately, curare is not selective in action. Muscles other than those in spasm may be affected. Indeed, as Drs. Rosenberg and Fischer have recently pointed out *(Pediatrics* 1:648-656, 1948), curare may increase the patient's difficulty by paralyzing the normal antagonists of spastic muscles. In addition, the cumulative effect of curare makes decision of proper dosage difficult. There would seem to be little to recommend its general use in acute stages of poliomyelitis.

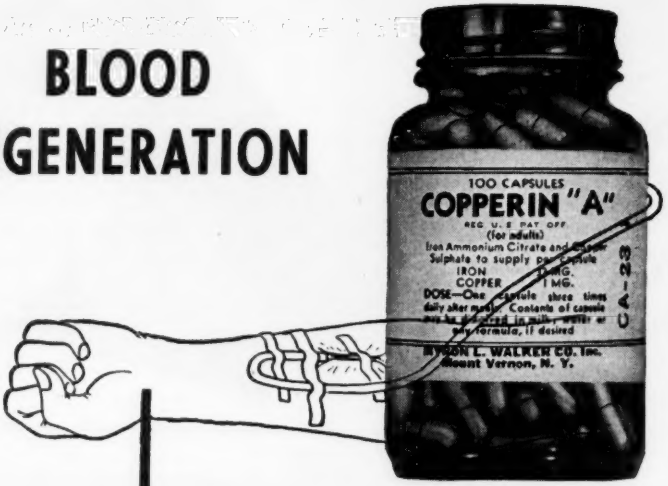
ALFRED L. FLORMAN, M.D.

New York City

*MODERN MEDICINE, Apr. 15, 1949, p. 47.

*MODERN MEDICINE, Aug. 1, 1949, p. 69.

BLOOD REGENERATION



IN SECONDARY ANEMIA

• Non-utilization of iron prescribed for the anemic patient, and its consequent excretion fecally, produces gastrointestinal upset and often defeats the original purpose for which it was intended.

Through the catalytic action of the copper sulphate in Copperin, the amount of iron ammonium citrate per capsule is reduced to only 32 mgm., but ALL the iron is made available for regenerative processes and the maximum therapeutic effect is obtained.

Available for adults in Copperin "A"; for children in Copperin "B".

Liberal professional samples sent on request

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MYRON L. WALKER COMPANY, Inc.
Mount Vernon, New York

WATER SOLUBLE **COPPERIN** NON-STAINING

Technic of Low Thigh Amputation*

TO THE EDITORS: We prefer low thigh amputation, as does Dr. William D. Holden, because it can be performed more quickly with less dissection of muscle tissue than is required when mid thigh amputation is employed.

The particular variety of low thigh amputation which we like to perform in clean cases is the Stokes-Gritti amputation. This is improved by metallic internal fixation of the patellar flap to the femur stump by one or two stainless steel or Vitallium screws, which are countersunk in the patella.

With this modification osseous union occurs more quickly. The end of the stump is then the anterior patellar surface, which is painless from the start.

The amputation level is supracondylar at a point where the transverse diameter of the femoral shaft is exactly equal to the transverse diameter of the transected patella.

PAUL H. HARMON, M.D.

Oakland, Calif.

*MODERN MEDICINE, Mar. 1, 1949, p. 58.

What Would You Say?

Twice a month we will select a caption written by a doctor for this cartoon and send the writer $5. Mail your caption to MODERN MEDICINE, 84 South 10 St., Minneapolis 3, Minnesota.

"Well you see, sir, some parts wear out sooner than others."—Submitted by F. M. Meixner, M.D.

Dr. Herbert M. Evans 1882-

Dr. Evans began his career as an embryologist and histologist. He demonstrated the origin of the vascular trunks within the bodies of vertebrate embryos as a result of the transformation of capillary plexi. He conducted an extensive series of researches on the causes of vital staining with acid azo dyes and introduced "vital" azo dyes (Evans Red and Evans Blue) for the estimation of blood volume in man and animals.

Dr. Evans discovered and charted 48 chromosomes in man, first detected the characteristic sign of deficiency in fat-soluble vitamin A in the cornification of the vaginal mucosa; and discovered fat-soluble vitamin E. He was the first to produce experimental gigantism in animals from extracts of the anterior hypophysis. With the assistance of C. H. Li, he carried out extensive research on the hormones of the anterior hypophysis. Outstanding among these was the purification of the growth hormone. Dr. Evans also has engaged in a notable series of studies of the effects of the isolated and purified protein hormones of the anterior hypophysis.

Short Reports

TREATMENT

Effect of Cortisone on Addison's Disease

Treatment of Addison's disease with cortisone may provide striking relief for several months. From 50 to 100 mg. is injected daily in oil or water for two to six days, and 5 to 10 pellets of 50 mg. each are implanted. About 0.5 mg. is absorbed daily from an implanted pellet. Significant metabolic changes are induced by this treatment, assert Dr. P. H. Forsham and associates of Harvard University, Boston. The electroencephalogram becomes more normal and the thyroid absorbs more iodine. Blood ketone bodies increase, blood sugar rises, and fasting is better tolerated. Small amounts of sodium and chloride are retained and more uric acid is excreted. Urinary 17-ketosteroids increase slightly.

J. Clin. Endocrinol. 9:660, 1949.

BIOCHEMISTRY

New Vitamin in Yeast

A substance called biocytin, a new vitamin factor, has been isolated from yeast. As yet Dr. Lemuel D. Wright and associates of Philadelphia have discovered no medical use for the substance, but studies are under way to determine its properties. The pure vitamin occurs in extremely small quantities. Out of more than 8 tons of yeast extract less than 1/30 oz. of biocytin has been produced.

PEDIATRICS

Isolation of Diarrhea Virus

A filterable agent, recently isolated from stools of infants with diarrhea, regularly reproduces the same disease in calves. This virus may be the cause of epidemic diarrhea of the newborn. From four separate epidemics in Washington and Baltimore hospitals, Drs. Jacob S. Light of Sydenham Hospital and Baltimore City Health Department and Horace L. Hodes of Johns Hopkins University, Baltimore, recovered identical or closely related strains of virus. In none of the epidemics were known pathogenic bacteria found.

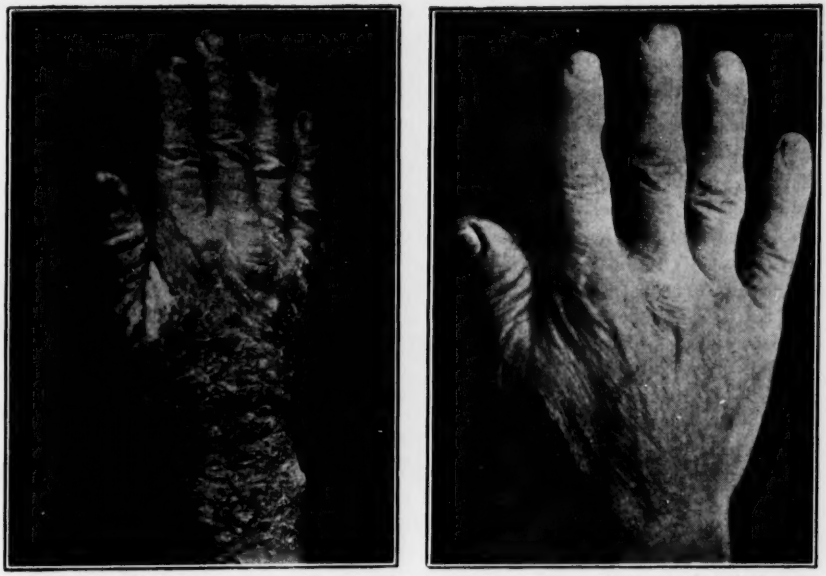
J. Exper. Med. 90:113-135, 1949.

NUTRITION

Vitamin B_{12} and Growth

A principle that stimulates growth may be contained in vitamin B_{12}. Rate of growth of weaned pigs is accelerated when a dietary supplement of vitamin B_{12} is fed. Of a dozen animals given a corn-soybean ration ad libitum at the age of six weeks, 6 received the supplement. Dr. R. W. Luecke and associates of Michigan State College, East Lansing, report that within seven weeks the B_{12} group gained an average of 17 lb. more than the others. A pound of gain was produced by each 2.7 lb. of feed, in contrast to 2.9 lb. of feed required for the same gain without the vitamin.

Science 110:139-140, 1949.



Photographs above show eczema of 7 years' duration and after 5 months' treatment with Mazon.

The First Consideration in the Treatment of Eczema Local and Symptomatic Therapy

Because of its diverse manifestations and the multiple etiologic factors including sensitization, local treatment of eczema is necessary in all cases—and in many instances is all that is required. Mazon, a thoroughly acceptable combination of mercury salicylate, sodium stearate, benzoic acid, salicylic acid and tars, is a non-staining, non-greasy preparation clinically efficacious in treating stubborn eczematous lesions when systemic or metabolic involvement is not demonstrable.

BELMONT LABORATORIES, Philadelphia, Penn.

MAZON

HORMONES

Seed of African Vine May Provide Source of Cortisone

Bile of slaughtered cattle, now the starting point for synthesis of cortisone, may be replaced by seeds from an African plant, *Strophanthus sarmentosus.* A chemical substance called sarmentogenin, recoverable from the seeds, is a chemical ancestor of cortisone and is twenty steps closer to the final product than desoxycholic acid in ox bile. Chief advantage of the vegetable source is that the plant could be grown in unlimited quantity. An obstacle, however, is that of about thirty species of strophanthus only the one, *Strophanthus sarmentosus,* appears to produce the desired 11-oxy-steroid chemical grouping, and then only under special growing conditions and at certain times in the seed cycle.

Dr. John T. Baldwin of the U.S. Department of Agriculture and Dr. Erich Mosettig of the U.S. Public Health Service have been assigned to track down the right species of strophanthus and to collect plants, seeds, and cuttings for the purpose of establishing cultivation of the plant in the Western Hemisphere. To speed investigation of the medical possibilities, the U.S. Public Health Service has asked an emergency appropriation of $1,750,000.

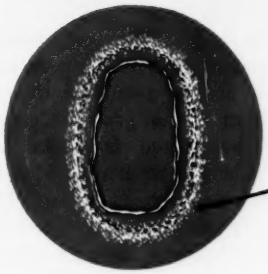
In the area between Liberia and the Cameroons, where the plant thrives, natives are prohibited from growing the vine. The ban was necessary because the plant was being used in making an arrow poison and a brew for trial by ordeal. Almost invariably the persons tried by ordeal died from the powerful heart-stimulating glucosides in the potion.

If the hopes for *Strophanthus sarmentosus* are born out, cultivation will probably be legalized under controlled conditions, just as poppies are raised for opium. Under the best circumstances, however, years will be necessary before the outcast sarmentosus plant will become one of the world's major crops.

STATISTICS

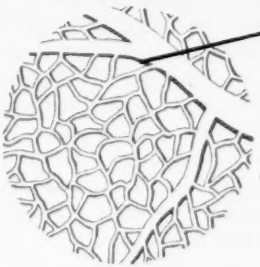
Life Expectancy Increases

Average length of life in the United States has risen about two years above the level reached in the three years just before World War II. Figures compiled by the National Office of Vital Statistics show that a white female born in 1947 had a life expectancy of about seventy years. She could expect to live five years longer than a white man, about eight years longer than the colored woman, and almost thirteen years longer than the colored man. The average life expectancy for the total population is more than sixty-six years, slightly higher than in 1946.



relax the Arterioles

support the Capillaries



in Hypertension management

To aid in preventing rupture of the capillary walls while simultaneously relaxing abnormal arteriolar constriction—this is the aim of drug therapy made possible by—

RUTOL

a brand of Rutin, Phenobarbital and Mannitol Hexanitrate, P-M Co.

EACH TABLET CONTAINS:

Rutin	10 mg. (⅙ gr. approx.)
Phenobarbital	8 mg. (⅛ gr.)
Mannitol Hexanitrate	16 mg. (¼ gr.)

Bottles of 100, 500 and 1000 tablets

Vasodilation is provided by the central effect of phenobarbital and the direct smooth muscle relaxing effect of mannitol hexanitrate on the vascular walls.

Capillary support is supplied by the effect of rutin in prevention and correction of increased capillary fragility.

PITMAN MOORE COMPANY

PHARMACEUTICAL AND BIOLOGICAL CHEMISTS

DIVISION OF ALLIED LABORATORIES, INC., INDIANAPOLIS 6, INDIANA

TREATMENT

Thioarsenite Amebacides

Derivatives of carbarsone appear to be more effective than the parent drug for treatment of intestinal amebiasis. Toxicity is slight. At Memphis, Tenn., and San José, Costa Rica, 100 patients harboring parasites were given one of two new thioarsenites, either C.C.914 or C.C.1037. Parasites disappeared from 82 patients, 77 of whom were affected with *Endamoeba histolytica,* report Dr. Hamilton H. Anderson of the University of California, San Francisco, and associates. For adults the total oral dosage was 3.0 to 7.2 gm. given over a period of ten to twenty-four days. No cutaneous reaction or damage to other tissues was observed. After receiving 200 mg. of either preparation, however, 12 patients became nauseated or vomited. In all but 1 case completion of therapy was possible by coating the tablets.

J.A.M.A. 140:1251-1256, 1949.

for prompt relief of pain in:

simple headache
neuralgia
neuritis
grippe
dysmenorrhea
sinusitis
muscle and joint discomfort
rheumatism

...write "Edrisal" Edrisal is remarkably effective. This is because it is the only analgesic preparation that contains 'Benzedrine' Sulfate, the rational anti-depressant. Edrisal, therefore, not only relieves the pain itself but also—by lifting your patient's mood—lessens his concern with his pain. Best results are usually obtained with a dosage of *two* Edrisal Tablets—repeated every three hours, if necessary.

Smith, Kline & French Laboratories, Philadelphia

Each Edrisal tablet contains Benzedrine* Sulfate (racemic amphetamine sulfate, S.K.F.), 2.5 mg.; acetylsalicylic acid, 2.5 gr.; and phenacetin, 2.5 gr. Available on prescription only.*

Edrisal

its dual action relieves pain, lifts mood

*'Benzedrine' and 'Edrisal' T.M. Reg. U.S. Pat. Off.

NUTRITION

Effect of Protein Deficiency on Anemia and Leukopenia

Hemopoiesis may occur when protein is supplied by a diet which has insufficient total calories for weight gain. Dr. K. Guggenheim and Edith Buechler of the Hebrew University, Jerusalem, found that in general hemopoiesis is highest with egg and meat and lowest with maize, wheat, and gelatin. Nutritionally inferior proteins tend to impair both hemoglobin and leukocyte regeneration. Casein, soya, and maize proteins are more efficient for hemoglobin formation than for granulocyte production. Wheat protein and gelatin have a higher granulocytopoietic capacity.

Blood 4:958-969, 1949.

PREVENTIVE MEDICINE

Hypertensive Pattern

Inability to lose much weight after a day of sodium deprivation may reveal a latent tendency to high blood pressure. Like hypertensive subjects, some healthy young men lose less weight than is usual after twenty-four hours of rigid sodium restriction, report Dr. Caroline B. Thomas and associates of Johns Hopkins University, Baltimore. Of 64 unselected medical students, 47 lost 0.9% or more of body weight and 17 less than 0.9%. Low values were more common among subjects with hypertensive relatives, obesity, high normal blood pressure, or vasomotor hyperreactivity.

Bull. Johns Hopkins Hosp. 85:115-134, 1949.

TROPICAL MEDICINE

Pinworm Diagnosis

With anal swabs of transparent cellulose tape, specimens of pinworm ova are easily obtained. The method of Dr. Paul C. Beaver of Tulane University, New Orleans, can be employed by medical or lay personnel. A 3-in. strip of tape, adhesive side out, is held over one end of a tongue depressor with thumb and forefinger and the blade tip pressed to right and left against the line between anal canal and perianal folds. For mailing, the strip may be folded, adhesive side in. The contact zone is cut off and spread on a microscopic slide. Before eggs are counted a drop of toluene is added.

Am. J. Trop. Med. 29:577-587, 1949.

EXPERIMENTAL SURGERY

Postgastrectomy and Ulcer

Unless all but 2 or 3% of the secreting stomach mucosa is removed by gastrectomy for duodenal ulcer, recurrence at site of gastrojejunal union may be expected. Dr. James V. Oliver of the University of Illinois, Chicago, performed partial gastrectomy in one group of dogs and total gastrectomy in another. Duodenal secretions of all dogs were diverted into the terminal portion of the ileum. When about one-fourth of the stomach was left, stomal ulcers developed and the animals died in fifty to sixty days. When at least 98% of the stomach was removed, however, ulcers did not occur.

Arch. Surg. 59:199-209, 1949.

EXPERIMENTAL MEDICINE

Accelerated Production of Poliomyelitis

Food which enters the gastrointestinal tract may in some way act as a precursor or catalytic enzyme on a normal constituent of the tract and accelerate production of poliomyelitis. Dr. John A. Toomey of Western Reserve University, Cleveland, and associates report that supernates of various fruits when injected intracerebrally condition cotton rats so that later injections of poliomyelitis virus are followed by clearly defined acceleration in production of experimental disease. The acceleration can also be brought about by succinic acid, a substance common to all fruits and vegetables, and by succinonitrile, a synthetic preparation.

Am. J. Dis. Child. 78:1-15, 1949.

HORMONES

Metabolic Effects of Cortisone

In hypertension blood pressure is slightly reduced and low levels in Addison's disease are elevated by cortisone (Compound E), an adrenal cortical steroid. Daily doses of 80 mg. given by Dr. George A. Perera and associates of Columbia University, New York City, increased salt and water retention, decreased serum sodium and total cholesterol, and induced an inconstant negative nitrogen balance. Circulating polymorphonuclear leukocytes usually rise during treatment and eosinophils drop. In some cases the fasting blood sugar is raised and a transient acetonuria may develop.

Am. J. Med. 7:56-69, 1949.

AWARDS

Surgeon Honored

The Alvarenga Prize of the College of Physicians has been awarded to Dr. Owen H. Wangensteen of the University of Minnesota, Minneapolis, for his contribution to the understanding of the etiology and therapy of gastric and duodenal ulcer.

ANTIBIOTICS

Black Hairy Tongue

The appearance of a black, hairy nap on the tongue has been traced directly to the oral administration of penicillin. When the antibiotic is discontinued the condition disappears in about one month. Dr. Samuel A. Wolfson of Wadsworth General Hospital, Los Angeles, believes that the condition is probably more prevalent than has been reported, because a black tongue is often attributed to the disease being treated.

J.A.M.A. 140:1206-1208, 1949.

EDUCATION

Scholarships Available

Applications for five-year medical science scholar awards will be received by the John and Mary R. Markle Foundation, New York City, until Dec. 1. Each recipient will become a full-time faculty member at a medical school. The awards are for $25,000 each, payable to the school for the scholar at the rate of $5,000 a year. The awards are made to encourage young scientists who are interested in teaching or research in medicine. Since the program was initiated in 1948, a total of 29 scholars have been appointed.

for "This wormy world"

Diphenan

209 MILLION persons act as hosts to Oxyuris (Enterobius) vermicularis according to Stoll's fascinating article "This Wormy World".[1] This undesirable tenancy can be terminated with the aid of 'Tabloid' brand Diphenan, by mouth, for Diphenan kills the worms by direct action on the parasite.

Since these worms make no distinction as to age or social status—Diphenan's palatability, safety and economy are important considerations. One or two products t.i.d. for adults; ¼ of a product t.i.d. for children up to 3; ½ t.i.d. for children up to 10, and 1 t.i.d. for older children. 'Tabloid' brand Diphenan is supplied as wintergreen-flavored chewing wafers of 0.5 grams each in bottles of 20.

BURROUGHS WELLCOME & CO. (U.S.A.) INC., TUCKAHOE 7, N.Y.

1. Stoll, Norman R., Jl. of Parasitology 33.1 No. 1 (Feb.) 1947.

MICROBIOLOGY

Virus Causing Disease Like Poliomyelitis Is Isolated

A disease closely resembling nonparalyzing poliomyelitis is caused by a filtrable virus that has been isolated by Dr. Joseph L. Melnick and associates of Yale University, New Haven, Conn. The virus was found in excreta of patients with illnesses diagnosed as aseptic meningitis, poliomyelitis, and fever of unknown origin. All the patients had some of the symptoms usually associated with poliomyelitis. The illnesses last for about ten days. Recovery is uneventful, without crippling after effects. The disease has been found to occur simultaneously with poliomyelitis in the summer season and was first reported last year by Drs. Gilbert Dalldorf and Grace Sickles of the New York State Department of Health, Albany, N.Y. Investigation of the new virus, as yet unnamed, is being continued at Yale University, supported by a grant from the National Foundation for Infantile Paralysis.

Proc. Soc. Exper. Biol. & Med. 71:344-349, 1949.

IMMUNOLOGY

Mumps Vaccine

A practical method of vaccination for mumps may be possible with development of a new vaccine prepared from heat-killed virus. Whether the immunity produced is permanent is yet to be determined. The vaccine has been given intracutaneously to human volunteers by Dr. Hascall H. Muntz and associates of the Indiana University Medical Center, Indianapolis. The vaccine causes an important rise in complement-fixing antibody titers. No severe reactions have been noted. A hypersensitive local skin reaction similar to that of the Mantoux test apparently indicates previous contact with the virus.

J. Lab. & Clin. Med. 34:199-208, 1949.

PUBLIC HEALTH

Poliomyelitis Quarantine

Prolonged isolation of patients with poliomyelitis is unnecessary. Quarantine for only a week is sufficient in most cases, announces the National Conference on Recommended Practices for the Control of Poliomyelitis. When fever persists for more than a week, isolation is desirable until the fever subsides.

EDUCATION

Course on Chest Diseases

The American College of Chest Physicians announces a postgraduate course in diseases of the chest to be held in New York City, November 14 through 18. Information may be obtained from American College of Chest Physicians, 500 North Dearborn St., Chicago 10.

Ulcerative Colitis

New oral management revealed*

Peptic Ulcer

Duodenum desiccated and defatted by a special process (Viodenum), is being evaluated clinically in the treatment of ulcerative colitis and peptic ulcer, on the hypothesis that it may render the mucosa more resistant to chemical and mechanical injury and improve the mechanisms of repair... *Preliminary observations indicate a thorough clinical trial with Viodenum in those patients refractory to other treatment.* The medication should be viewed as supportive therapy to the usual treatment.

Viodenum

Provided in powder or 10 grain tablets

Raw* duodenum, desiccated and defatted at 37° C.

*"Rawness" measured by: presence of enzymes identified with the raw tissue of the freshly killed animal

Administration of Viodenum may result in—

relief of symptoms
diminishing bowel movements
diminishing exacerbations
normal stool consistency
gain in weight

*References:

*Streicher, M. H. F., Grossman, M. I., and Ivy, A. C., Gastroenterology, **12,** 371 (1949)

*Raimondi, P. J., Goetzl, F. R., Permanente Foundation Medical Bulletin, **7,** 1 (1949)

Gill, A. M., Lancet, **2,** 202 (1945); Proc. Roy. Soc. Med., **39,** 517 (1946)

Rivers, A. B., Am. J. Dig. Dis., **2,** 189 (1935)

Viodenum

VIOBIN LABORATORIES

MONTICELLO, ILLINOIS, U. S. A.

Literature available on request

A Pharmaceutical Triumph

In Vi terra, J. B. Roerig and Company offer you for the first time a more complete, balanced formula for the management of multi-vitamin deficiencies. Vi terra is the result of years of intensive research, together with months of pharmaceutical manufacturing research. Indicated wherever you would normally use multi-vitamins.

9 vitamins and 12 minerals } all in 1 capsule

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Multi-vitamins are not alone the complete answer to protective nutrition. More and more, the mineral elements are being recognized as "spark plugs"—playing an all-important, if still unmeasured part in building and restoring body health. The catalytic-synergistic action of the minerals with the vitamins makes the difference in speeding up enzymatic processes on which the body is dependent for its functions.

Vi terra contains all the vitamins known to be essential to human nutrition and, in addition, 12 minerals designed to act as catalysts in improved vitamin metabolism. Advance clinical reports indicate that when proper minerals are supplied with the necessary vitamins, the powerful activity of the enzymes present in the body is stimulated and increased.

With **Vi terra,** the physician or surgeon can anticipate more rapid and potent effects than can be obtained with less complete formulations.

ALL IN ONE CAPSULE

VITAMINS		MINERALS	
Vitamin A *(Refined Fish Liver Oil)*	5,000 USP Units	Cobalt *(Cobaltous Sulf. .7 H_2O)*	0.1 mg.
Vitamin D *(Irradiated Ergosterol)*	500 USP Units	Copper *(Cupric Sulfate)*	1 mg.
Vitamin B_1 *(Thiamine Hydrochloride)*	3 mg.	Boron *(Sodium Metaborate)*	0.2 mg.
Vitamin B_2 *(Riboflavin)*	3 mg.	Iron *(Ferrous Sulfate)*	10 mg.
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DOSAGE: Due to the catalytic-synergistic action of certain minerals with vitamins in vivo, it is suggested that one **Vi terra** capsule a day will serve adequately for supplementary nutrition. For quicker results three or more **Vi terra** capsules daily may be prescribed. Supplied in bottles of 100 capsules. You are invited to send for a clinical trial supply.

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Heart Grants Total Ten Millions

Funds allocated to 85 medical schools and research institutions throughout the nation

A LARGE scale, nationwide attack on heart disease was launched last fortnight. At that time federal funds totaling $8,614,737 were awarded to 85 medical schools and research institutions in 34 states and the District of Columbia, according to an announcement by Federal Security Administrator Oscar R. Ewing.

To be administered by the National Heart Institute of the Public Health Service, the funds will be used for accelerating investigation of cardiac disease, for expanding teaching programs in medical schools, and for the building of additional heart research laboratories throughout the country.

The grants were approved by Surg. Gen. Leonard A. Scheele of the U. S. Public Health Service following recommendation by the National Advisory Heart Council.

These grants are in addition to those announced in July, amounting to $1,200,000 for continuing research projects already under way, and provide a total of nearly $10,000,000 in federal funds for the fight against heart disease during the fiscal year ending June 30. This represents more than a six-fold increase over grants for like research last year.

"This marks the first broad scale federal support of the attack on heart disease under the National Heart Institute," said Surg. Gen. Scheele. "It complements the programs of the American Heart Association and other nongovernmental groups. Alone, neither the privately supported programs nor the federal effort would provide this urgently needed mobilization of forces against the leading cause of death in the United States."

Heart disease, which claims over 625,000 lives annually, is recognized as among the foremost public health problems of today.

"Victory over heart disease will require much new knowledge first," said Dr. C. J. Van Slyke, Director of the National Heart Institute, in commenting on the grants. "Heart disease is not one but a number of problems. It will take many men and women, working in many special branches of scientific research, to amass the new knowledge necessary before we can arrive at definitive answers. Today we stand at the threshold."

In an effort to learn more about the diseases of the heart and blood vessels and how to deal effectively with them, research scientists will utilize the grants to investigate on broad fronts the problems involved. Environmental and hereditary factors as related to heart disease will come under observation.

Scientists will evaluate dietary factors, recent surgical methods, and the usefulness of new drugs and substances such as ACTH and cortisone. Diagnostic instruments, like the electrokymograph used to investigate the

compare

RESINAT'S RESULTS WITH ANY OTHER FORM OF ANTACID THERAPY

Mounting clinical evidence continues to support claims as to the efficacy of **RESINAT.** The latest report on 120 patients treated with **RESINAT,** demonstrates complete symptomatic relief in 48-72 hours and regression of the ulcer crater in 2-4 weeks in the majority of cases.[1]

RESINAT:

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2. Acts as an adsorbent.
3. Coats the gastric mucosa.
4. Does not cause constipation or diarrhea.
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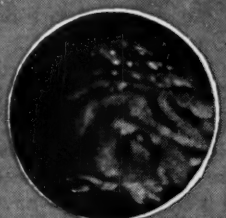

Gastrophotograph of mucosa coated by Resinat.

Gastrophotograph of mucosa coated by other substance.

1. Weiss, S., Espinal, R.B. & Weiss, J.: Therapeutic Application of Anion Exchange Resins in the Treatment of Peptic Ulcer, Review of Gastroenterology, 16:501-509, June, 1949.

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movements of the heart and the ballistocardiograph, which indirectly determines cardiac output, will be studied for their applications. Other grants will support investigations seeking to perfect a mechanical heart to replace the human heart during cardiac operations.

Diet will be investigated in order to determine more clearly its role in arteriosclerosis. Scientists have found that in a great number of cases of arteriosclerosis, the blood level of cholesterol is elevated. They have also found that cholesterol forms part of the ulcer-like lesions on the walls that frequently become sites for the dangerous blood clots responsible for heart attacks. By feeding one group of animals a diet rich in cholesterol and another group a diet poor in cholesterol, some relationship between diet and arteriosclerosis may be established. In other research projects cholesterol will also be tagged with radioactive carbon in order to study how the body handles the fatty substance.

There is evidence that substances in the blood may be responsible for high blood pressure. Secretions of the liver and kidneys into the blood will come under close scrutiny in efforts to detect factors responsible for high blood pressure cases. Also investigated will be the salt and water exchange of patients with heart disease, since a disturbance in this equilibrium accompanies heart failure.

Investigators into the causes of rheumatic fever will be given financial aid in their attempt to learn the role of the adrenal cortex gland in protecting the body against allergic reactions. Recent findings have indicated that rheumatic fever may be an allergic reaction to some streptococcus infections.

A prevailing theory is that the normal adrenal cortex exerts a protective action against unusual sensitivity. Possibly this gland is injured during a streptococcus infection and becomes incapable of exerting protective action. As a result, rheumatic fever occurs. By studying the activity of adrenal cortical functions in patients with scarlet fever and acute rheumatic fever, something may be learned about both rheumatic fever and the action of the adrenal gland.

The National Heart Institute, administrator of the funds, was established in August 1948, under authority of the National Heart Act, and is one of the National Institutes of Health, the research arm of the Public Health Service, with headquarters in Bethesda, Md.

In addition to conducting heart research in its own laboratories, the institute supports investigations and training related to the cause, prevention, and methods of diagnosis and treatment of heart disease in nongovernment institutions.

The categories of grants announced are:

► For 189 research investigations in 66 nonfederal institutions in 28 states and the District of Columbia, a total of $2,053,310.

► For improving and expanding cardiovascular teaching in 46 medical schools in 28 states and the District of Columbia, a total of $671,032.

► For providing necessary research laboratory facilities for study of heart diseases in 22 nonfederal institutions, a total of $5,890,395.

8 OUT OF 10

Intensive investigation during the past decade in rheumatism clinics throughout the country has shown conclusively that *eight out of ten* chronic arthritics adequately treated with Ertron® respond favorably. The local effect—diminished swelling and pain, increased mobility and joint function—is paralleled by a no less striking systemic effect, characterized by a sense of physical and mental well-being. Tolerance to Ertron is high. Severe reactions requiring cessation of therapy are rare (incidence 1.4%); minor side effects (incidence 8%) respond to temporary interruption of therapy or reduction of dosage and usually do not recur when treatment is resumed or dosage increased.

arthrokinetic action of ERTRON

". . . the function of small joints, particularly of the metacarpophalangeal and phalangeal joints, was evidenced by decrease in swelling and pain, allowing complete functional closure of both hands."[1]

systemic effect of ERTRON

". . . an improved sense of well-being, increased appetite, a more normal mental state, more restful sleep, less pain and, in almost every case the patient becomes very much more optimistic."[2]

tolerance to ERTRON

The use of Ertron in rheumatoid arthritis "has been characterized by almost complete absence of toxic effects, despite serum calcium concentrations sustained at high concentrations . . ."[3]

BIBLIOGRAPHY (1) Magnussen, P. B.; McElvenney, R. T., and Logan, E. E.: J. Michigan M. Soc. 46:71, 1947. (2) Snyder, R. G.; Squires, W. H.; Forster, J. W., and Rudd, E.: Indust. Med. 12:663, 1943. (3) Cohen, A., and Reinhold, J. G.: Indust. Med. 17:442, 1948.

Whittier LABORATORIES

Division Nutrition Research Laboratories • Chicago, Illinois

Washington Letter

(Continued from page 44)

didn't agree. (The Air Surgeon is not involved; the post was created only this year, and the appointment was not made by the President.)

Under the military reorganization act, the defense establishment became the Department of Defense, and the secretary's authority was increased and more clearly defined. From an organizational standpoint, there is no longer the same justification for presidential appointment of anyone below the secretary.

The test will come next April. At that time both Rear Adm. Clifford Swanson and Maj. Gen. R. W. Bliss will complete their terms as Navy and Army surgeons general. The issue will be decided in the appointment of their successors.

On the one side, the argument will be made that the posts are important enough to warrant presidential appointment, and that regardless, the procedure should be continued as an honor and a well-established precedent.

But Secretary Johnson is expected to oppose the presidential tie-in as improper and an interference with an orderly chain of command. The fact is that the surgeons general no longer are top men in military medicine; they are one step below the director of medical services.

Second Isotopes Course for Navy Reservists

Another nine-day course in medical aspects of special weapons and radioactive isotopes is scheduled for Navy reserves November 10 through 19 at Bethesda Navy center. Registration is limited to 210, on the basis of district quotas. At the first course, September 26 through October 1, military and civilian specialists in atomic medicine conducted lectures and demonstrations. The Navy also has set up four new correspondence courses for regular and reserve officers, all of which carry promotion and retirement points.

AEC Distributes More Than 7,000 Shipments of Isotopes

Almost one-third of the 7,025 radioactive isotopes released by Atomic Energy Commission to American institutions have been destined for research in cancer. A report by AEC on the third anniversary of the start of the isotopes program shows that 588 shipments have gone to foreign countries. The program has grown so rapidly that a special area is being constructed at Oak Ridge for the processing and packaging of the isotopes. To date, 307 institutions in the United States have received isotopes. AEC listed the use of radioactive dye to locate brain tumors as an important new medical use of the isotopes.

Water Pollution Board to Make on-Scene Studies

The Water Pollution Control Advisory Board, just a year old, has started a drive to halt the "disgraceful despoilment of our water resources."

Congress this session did not appropriate money for water project loans, and the board is attempting to get municipalities to undertake these projects on their own until federal funds are available.

The board noted the lack of federal money, but expressed the hope "that

this fact will not be used as an excuse for postponing the building of treatment works." To stimulate interest in this situation where there is urgent need for correction, the board plans to hold a number of meetings in various parts of the country during the next year.

U. S. Announces $5,000,000 in Medical Research Grants

In one period of less than two weeks, grants for medical research totaling more than $5,000,000 were announced by the Federal Security Agency. About $2,000,000 went for continuation of projects at nonfederal institutions.

Under this category were included studies of deafness and speech defects, peptic ulcers, the common cold, and relation of the endocrine glands to aging. Also included was one study on the nature of changes induced in the living cell by irradiation, which will be conducted by Carnegie Institution of Washington under a $8,500 grant.

Another group of grants, totaling $2,554,556, finances personnel training in psychiatry, neurology, clinical psychology, psychiatric nursing, and psychiatric social work. These grants, ranging from $1,200 to $3,600, will aid 456 graduate students, including 115 physicians.

The third big item was almost half a million dollars to underwrite 35 research projects on mental and nervous diseases.

"Sorry, fellows, that's my call."

Third of Non-white Births Unattended by Physicians

Although progress is being made in every direction in maternity care, the situation of the non-white mother still is far from satisfactory. This was brought out in a report covering births in this country in 1947. Although only 1.5% of white births were attended by midwives or other non-physicians, almost a third of the non-white births were in this class. In other words, for every white child born without medical attention, more than 20 non-white children were similarly neglected.

Other data brought out in the report:

There were 3,699,940 births in 1947, and 84.7%—a new record—took place in hospitals. In addition, 10.1% of the non-hospital births were attended by physicians.

Since 1935, the first year of the survey, the percentage of hospital births has more than doubled, and the percentage of physician-attended deliveries outside hospitals has decreased 80%.

they scrap about most things

but on one thing they agree—

This liquid penicillin tastes good!

Your young patients will take ESKACILLIN willingly because it is so deliciously flavored, so easy to swallow. Furthermore, parents much prefer ESKACILLIN to the chore of crushing penicillin tablets and coaxing a sick child to swallow an unappealing mixture.

One teaspoonful (5 cc.) of ESKACILLIN contains 50,000 units of crystalline penicillin G—and produces a blood level equivalent to that obtained with a 50,000 unit penicillin tablet. ESKACILLIN is supplied in 2 fl. oz. bottles, providing 600,000 units of penicillin.

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OBESITY: THE GENERAL PRACTITIONER'S GUIDE TO THE TREATMENT OF THE OBESE PATIENT *by* Edward H. Rynearson *and* Clifford F. Gastineau. 134 pp., ill. Charles C Thomas, Springfield, Ill. $3.50

DAS EKG-ABC: EINE SYSTEMATIK ZUR AUSWERTUNG VON ELEKTROKARDIOGRAMMEN *by* Max Waldhecker. 114 pp., ill. Georg Thieme, Stuttgart. 6.80 M.

MEDICINE OF THE YEAR: FIRST ISSUE 1949 *edited by* John B. Youmans. 143 pp. J. B. Lippincott Co., Philadelphia. $5

Surgery

CARE OF THE SURGICAL PATIENT *by* Jacob Fine. 544 pp., ill. W. B. Saunders Co., Philadelphia. $8

MINOR SURGERY *edited by* Sir Heneage Ogilvie *and* William A. R. Thomson. 2d ed. 192 pp., ill. Eyre & Spottiswoode, London. 14*s*.

AN ATLAS OF TRAUMATIC SURGERY *by* Joseph Trueta. 150 pp., ill. Blackwell Scientific Publications, Oxford. 30*s*.

Neurology

OBSERVATIONS ON THE PATHOLOGY OF HYDROCEPHALUS *by* Dorothy S. Russell. 138 pp., ill. H. M. Stationery Office, London. 6*s*.

VENTRICULOCISTERNOSTOMY *by* A. Torkildsen. 240 pp., ill. Johan Grundt Tanum, Oslo. 15 Kr.

Geriatrics

GERIATRIC MEDICINE: THE CARE OF THE AGING AND THE AGED *by* Edward J. Stieglitz. 2d ed. 773 pp., ill. W. B. Saunders Co., Philadelphia. $12

Orthopedics

OSTEOPATHIE RARE *by* C. Casuccio. 548 pp., ill. Edizioni Scientifiche Instituto Rizzoli, Bologna, Italy. 5,500 lire

TRAITÉ DES FRACTURES DES MEMBRES *by* H. Judet, *et al.* 3d ed. 405 pp. Librairie Maloine, Paris. 2,900 fr.

Pathology

PATHOLOGY OF THE NERVOUS SYSTEM: A STUDENT'S INTRODUCTION *by* John H. Biggart. 2d ed. 352 pp., ill. E. & S. Livingstone, Edinburgh. 21*s*.

ALLGEMEINE PATHOLOGIE UND PATHOLOGISCHE ANATOMIE *by* Albert Dietrich. 8th ed. 768 pp., ill. S. Hirzel, Stuttgart. 46 M.

DIE PERMEABILITATSPATHOLOGIE ALS DIE LEHRE VOM KRANKHEITSBEGINN *by* Hans Eppinger. 755 pp., ill. Springer, Vienna. 29.40 Sch.

THE 1948 YEAR BOOK OF PATHOLOGY AND CLINICAL PATHOLOGY *edited by* Howard T. Karsner *and* Arthur Hawley Sanford. 538 pp., ill. Year Book Publishers, Chicago. $4.50

Gynecology & Obstetrics

DIE GEBURTSHILFLICHEN OPERATIONEN *by* Heinrich Martius. 6th ed. 287 pp., ill. Georg Thieme, Stuttgart. 15.60 M.

HANDBOOK OF MIDWIFERY *by* Margaret Puxon. 326 pp. Sylviro Publications, London. 25*s*.

Anatomy

ORAL ANATOMY *by* Harry Sicher. 529 pp., ill. C. V. Mosby Co., St. Louis. $15

Cancer

DAS KREBSPROBLEM: EINFÜHRUNG IN DIE ALLGEMEINE GESCHWULSTLEHRE FÜR STUDIERENDE, AERZTE UND NATURWISSENSCHAFTLER *by* K. H. Bauer. 758 pp., ill. Springer, Berlin. 42 M.

"Our results with the molybdenum-iron complex have been...striking..."

Dieckmann, W. J. and Priddle, H. D.:
Am. J. Obst. & Gynec. 57: 541 (1949)

UNTIL recently Dieckmann has repeatedly reported that true hypochromic anemia of pregnancy did not respond satisfactorily to orally administered iron.[1,2]

Now, however, following his latest investigation—a study of the value of molybdenized ferrous sulfate (Mol-Iron)—he states:

> "We have never had other iron salts so efficacious in pregnant patients. Our results with the molybdenum-iron complex have been . . . striking . . . increases in hemoglobin were . . . dramatic and . . . rapid."[3]

This most recent evaluation of molybdenized ferrous sulfate (Mol-Iron) confirms the findings of all earlier investigators, who found Mol-Iron to be:

> ". . . unusually efficacious . . ."[4]
> ". . . a true example of potentiation of the therapeutic action of iron . . ."[5]
> ". . . hemopoietically more active . . ."[6]

and remarkably well tolerated.[5,7]

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MOLYBDENIZED FERROUS SULFATE

—a specially processed, co-precipitated, stable complex of molybdenum oxide 3 mg. (1/20 gr.) and ferrous sulfate 195 mg. (3 gr.). Recommended adult dosage: 2 Tablets, t.i.d. Available in bottles of 100 and 1000 Tablets and in a highly palatable Liquid, in bottles of 12 fluid ounces (each teaspoonful equivalent to one Tablet).

1. Adair, F. L., Dieckmann, W. J., and Grant, K.: Am. J. Obst. & Gynec. *32*:560 (1936).
2. Talso, P. J., and Dieckmann, W. J.: Am. J. Obst. & Gynec. *55*:518 (1948).
3. Dieckmann, W. J., and Priddle, H. D.: Am. J. Obst. & Gynec. *57*:541 (1949).
4. Neary, E. R.: Am. J. Med. Sci. *212*:76 (1946).
5. Healy, J. C.: J. Lancet *66*:218 (1946).
6. Chesley, R. F., and Annitto, J. E.: Bull. Marg. Hague Maternity Hosp. *1*:68 (1948).
7. Kelly, H. T.: Penn. M. J. *51*:999 (1948).

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Radiology

ABC DER ROENTGENTECHNIK *by* Karl Bauer; *edited by* H. Vogler *and* E. Wagner. 3d ed. 708 pp., ill. Georg Thieme, Leipzig. 34 M.

CLINICAL RADIATION THERAPY *by* Ira I. Kaplan. 2d ed. 844 pp., ill. Paul B. Hoeber, New York City. $15

MEDICAL PHOTOGRAPHY: RADIOGRAPHIC AND CLINICAL *by* T. A. Longmore. 4th ed. 1,008 pp., ill. Focal Press, London, 50*s.*; New York City. $15

ATLAS OF ROENTGENOGRAPHIC POSITIONS *by* Venita Merrill. 708 pp., ill. C. V. Mosby Co., St. Louis. $30

Endocrinology

FEMALE SEX ENDOCRINOLOGY *by* Charles H. Birnberg. 134 pp., ill. J. B. Lippincott Co., Philadelphia. $4

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Dermatology

SKIN DISEASES IN GENERAL PRACTICE *by* F. Ray Bettley. 260 pp. Eyre & Spottiswoode, London. 21*s.*

THE STORY OF SCABIES: VOLUME 1 *by* Reuben Friedman. 468 pp., ill. Froben Press, New York City. $7.50

Psychiatry

THE BASIC NEUROSIS: ORAL REGRESSION AND PSYCHIC MASOCHISM *by* Edmund Bergler. 351 pp. Grune & Stratton, New York City. $5

THE PSYCHOLOGY OF ABNORMAL PEOPLE *by* John J. B. Morgan *and* George D. Lovell. 673 pp., ill. Longmans, Green & Co., New York City. $4.50

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LIVING WISELY AND WELL *edited by* William B. Terhune *et al.* 95 pp. E. P. Dutton & Co., New York City. $2

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DICTIONARY OF GENETICS: INCLUDING TERMS USED IN CYTOLOGY, ANIMAL BREEDING AND EVOLUTION *by* R. L. Knight. 183 pp., ill. Chronica Botanica Co., Waltham, Mass. $4.50

ELÉMENTS DE GÉNÉTIQUE (SCIENCE DE L'HÉRÉDITÉ) *by* E. Van Campenhout. 2d ed. 196 pp., ill. Edition Casterman, Tournai, Belgium. 60 fr.

Medical History

THE NEW YORK ACADEMY OF MEDICINE: ITS FIRST HUNDRED YEARS *by* Philip Van Ingen. 572 pp., ill. Columbia University Press, New York City. $10

A HISTORY OF OTO-LARYNGOLOGY *by* R. Scott Stevenson *and* Douglas Guthrie. 155 pp., ill. E. & S. Livingstone, Edinburgh. 17*s*. 6*d*.

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MARRIAGE COUNSELLING *by* David R. Mace. 168 pp. J. & A. Churchill, London. 8*s*.

HOW TO BECOME A DOCTOR *by* George R. Moon. 131 pp., ill. Blakiston Co., Philadelphia. $2

MEDICAL ETYMOLOGY *by* O. H. Perry Pepper. 263 pp., W. B. Saunders Co., Philadelphia. $5.50

ALCOHOL AND HUMAN AFFAIRS *by* Willard B. Spalding *and* John R. Montague. 248 pp., ill. World Book Co., New York City. $1.64

MICROBES MILITANT: A CHALLENGE TO MAN *by* Frederick Eberson. 2d ed. 401 pp., ill. Ronald Press, New York City. $4.50

Nursing

MEDICAL MICROBIOLOGY FOR NURSES *by* Erwin Neter. 470 pp., ill. F. A. Davis Co., Philadelphia. $4

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PATIENTS . . . I Have Met

The editors will pay $1 for each story published. No contribution will be returned. Send your experiences to the Patients I Have Met Editor, MODERN MEDICINE, 84 South Tenth St., Minneapolis 3, Minn.

Never Had a Chance

A very talkative mother brought her small son in for a checkup before sending him to school. During the examination the doctor noticed that the boy did not seem to be paying much attention to him. So he finally asked him, "Do you have trouble hearing, son?"

"No, sir," the small boy replied quickly. "I just have trouble answering!"—R.S.

"Needle, doctor?"

Should Have Shopped Around

A recent delivery was not, apparently, entirely satisfactory. The patient, mother of two daughters and one small son, had told her boy that a baby was expected, and for months he eagerly anticipated the arrival of a brother. Then his mother came home from Mercy Hospital with another girl.

"Why did you go over there to get the baby?" wailed the disappointed little boy. "I told you to go to the Veterans Hospital—that's where they have all the boys."—R.R.

"The new doctor has certainly made a cleaning in the stork *market."*—R.A.

for Coughs...

in acute and chronic bronchitis and paroxysms of bronchial asthma . . . whooping cough, dry catarrhal coughs and smoker's cough . . .

PERTUSSIN Helps Nature by Increasing the Respiratory Tract Fluid

The effect of PERTUSSIN'S active ingredient, Extract of Thyme (made by the unique Taeschner Process), is to *assist Nature to work*—with the following beneficial results:

1. Relieves dryness by stimulating tracheobronchial glands
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Entirely free from opiates, creosote and chloroform, PERTUSSIN is well tolerated—without undesirable side action—by children and adults alike, and is pleasant to take.

SEECK & KADE, INC. • NEW YORK 13, NEW YORK

Certainly a Mess

Tiny four-year-old Joe was wheeled into minor surgery for a tonsillectomy. He sat up on the cart as he spied the doctor removing his shirt and preparing to scrub.

"Aren't you all mixed up, doctor?"

"Why do you ask that?" queried the doctor.

"Why, you've got all the hair on your chest and none on your head."—J.G.

"But I want mumps. My whole class has them!"

Measured Reply

I was called to see an elderly gentleman with a tremendously distended abdomen. The patient was complaining bitterly of recurrent abdominal pains.

I jocularly inquired, as I often do when I see a male with a large protuberant belly, "How far apart are your pains?"

The patient replied, "From the top of my stomach to the groin."—D.A.G.

A burly ex-marine being treated for a rectal condition called out as I entered his room, "Who goes there —friend or enema?"—W.C.

Knows Better

In the absence of the school nurse, I was sent out to help vaccinate some pupils. One little girl had very bad adenoids. Her chart was sent home checked for smallpox vaccination and bad adenoids. The next day her mother sent a note saying that she had washed and fine-combed the child's hair and the girl did not have adenoids.—E.M.

Tired, Anyway

Dr. Jones dictates all his case histories and his medical secretary prints them on index cards. Recently he was going over a record of a patient and noticed to his amusement that his secretary had printed "physic fatigue" instead of "psychic fatigue."—M.P.

Bashful Blunder

In an anatomy class, the professor was giving an oral quiz on the previous day's assignment.

"Mary," he asked, "What part of man can enlarge seven times its normal size?"

Mary blushed and stammered, "I—I'd rather not say, professor."

"Ralph, you answer the question."

"The iris of the eye, sir," replied the student.

"Right," said the professor and turned to Mary. "Young lady," he said, "in the first place, you didn't study your lesson. In the second place, you have a dirty mind. In the third place, someday you're going to be a very disappointed girl!"—B.B.

He Knew the Answers

A five-year-old came into our office with his mother. While she was being treated, the boy stayed in the waiting room. Remembering that his aunt had been ill, I asked how she was.

"Fine," was the reply.

"What was the trouble," I asked, "grippe?"

"No," said the five-year-old. "She was going to have a baby, but she threw up the seed!"—E.G.

UNIFORMITY

America's finest drug plant is devoted solely to the making of Bayer Aspirin. Nothing you prescribe is more carefully made. To make sure that Bayer Aspirin is always uniform in quality, more than seventy tests and inspections are employed in its manufacture. Behind these tests and inspections are forty-seven years of experience in making *the* analgesic for home use . . . Bayer Aspirin.

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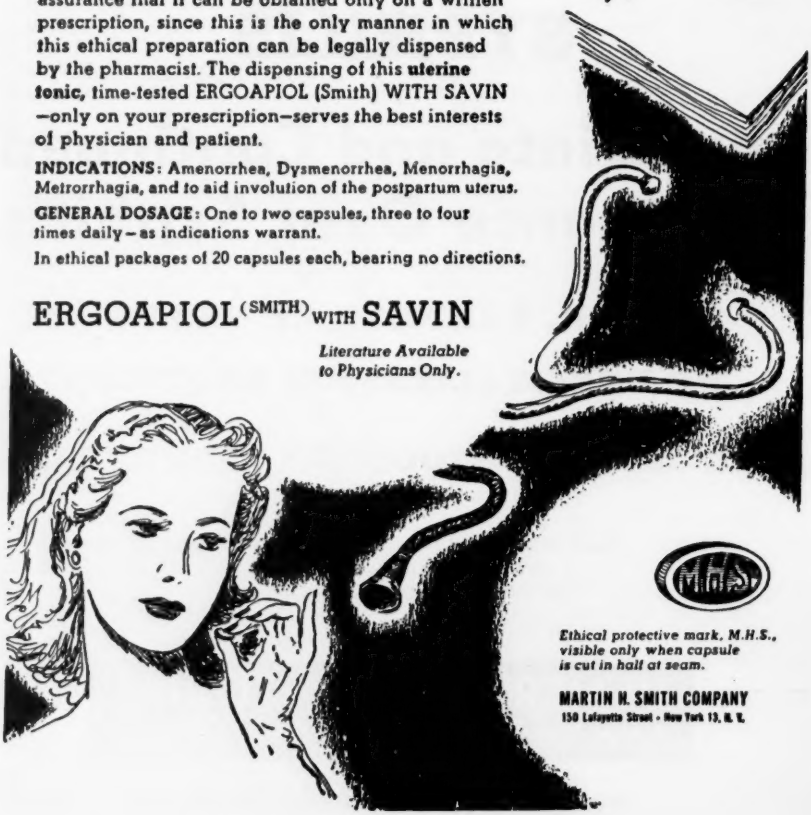

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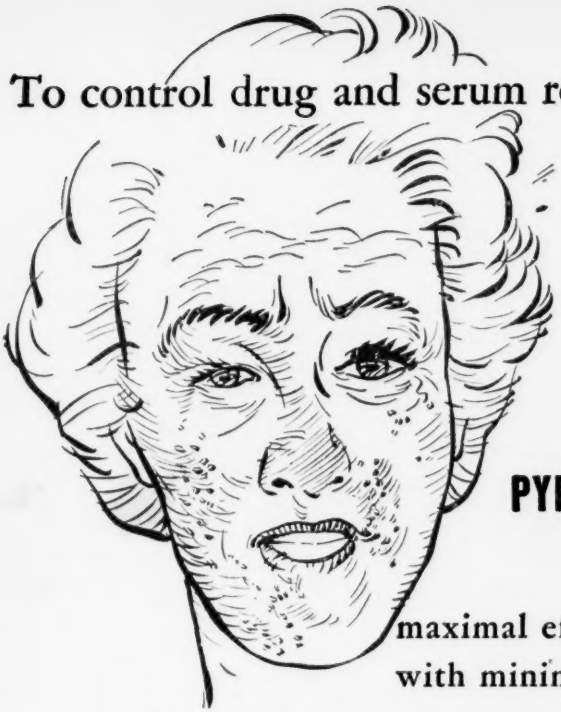

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1. Feinberg, S. M.: Postgrad. Med., 3: 92, Feb., 1948; 2. Arbesman, C. E., et al.: J. Allergy, 17: 275, Sept., 1946; 3. Feinberg, S. M., and Friedlaender, S.: Am. J. Med. Sci., 213: 58, Jan., 1947; 4. Fuchs, A. M., et al.: J. Allergy, 18: 385, Nov., 1947.

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